IP Camera Admin
User's Manual

Version 1.0

Nov. 05, 2012

VIEWZ
www.viewzusa.com

Index

1. Admin Menu of IP-PVMZ Servers 4
1.1. Entering Admin Menu 4
1.2. Admin Menu Structure 5
2. Quick Configuration 7
2.1. Step 1: Changing Server Name 7
2.2. Step 2: Time Setup 7
2.3. Step 3: Network Setup 7
2.4. Step 4: IP-CCTV DNS 7
2.5. Finish 7
3. System Configuration Menu 8
3.1. Server Name Setup 8
3.2. Date & Time 8
3.3. Admin Password 9
3.4. Access Control 10
3.5. User Registration 10
3.5.1. Add 10
3.5.2. Edit 12
3.5.3. Delete 12
4. Network Configuration 13
4.1. Network Configuration 13
4.1.1. Static IP Configuration 13
4.1.2. DHCP Client Configuration 14
4.1.3. PPPoE Configuration 14
4.2. Wireless LAN Configuration 14
4.2.1. ESSID 15
4.2.2. Authentication Mode & Encryption 15
4.3. Network Ports 16
4.4. Bandwidth Control Configuration 17
4.5. View Network Status 17
4.6. Network Status Notify 18
4.7. IP-CCTV DNS Setup 20
4.8. Port Forwarding & UPnP 20
4.9. RTP/RTSP Setup 21
5. Device Configuration 24
5.1. Serial Ports 24
5.1.1. Serial Input Mode 24
5.1.2. Serial Output Mode 26
5.1.3. Transparent Mode 26

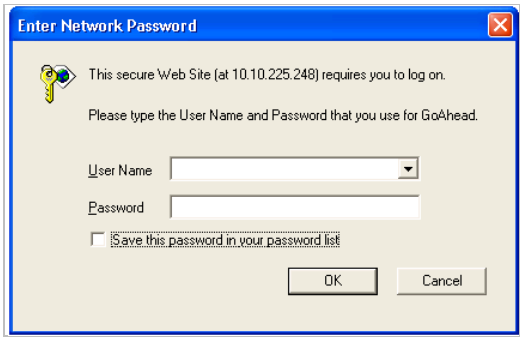
5.2. Camera & Motion 26
5.2.1. Camera & Motion 27
5.2.2. Built-in Camera Control 31
5.3. DI (Sensor Input) / DO (Alarm Output) 32
5.3.1. DI/DO 32
6. Advanced Configuration 34
6.1. Advanced Services 35
6.1.1. E-mail Service Configuration 37
6.1.2. FTP (Buffered) Service Configuration 41
6.1.3. FTP (Periodic) Service Configuration 44
6.1.4. Sensor Notification Service Configuration 46
6.1.5. Sensor Notification Service Configuration for Each Input 47
6.1.6. Alarm Output Service Configuration 48
6.1.7. Alarm Output Service Configuration for each Output 49
7. Utilities 50
7.1. System Log 50
7.2. Save Configuration 51
7.3. Reboot 51
7.4. Factory Default 51
7.5. System Update 52
7.5.1. All (Kernel, RAM disk, System, Web) Update 54
7.5.2. System and Web Update 55
7.5.3. Web Only Update 55
7.5.4. PTZ Device Driver Update 55
7.5.5. Sensor Device Driver Update 57
7.5.6. Flexible Extra system 57

1. Admin Menu of IP-PVMZ Servers

After connecting to a IP-PVMZ server on the web browser, you'll find the web page as shown below. The rightmost item of the menu is Admin, where you can set up the most of features in the IP-PVMZ Server you're connecting to.

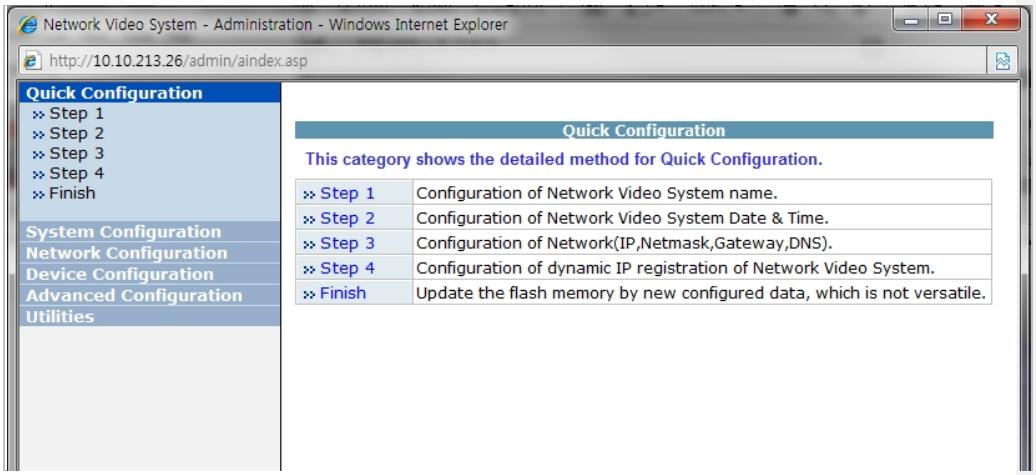
1.1. Entering Admin Menu

Click **Admin** item of the menu, then you'll see a login window. In the login window, enter **root** for both ID and password as they are the factory defaults. Press **Enter** key or click **OK** button. Once logged in, you can change the password to a new one.



Now the **Admin Menu** will be displayed as shown below. This will guide you to the top level menu items, which are Quick, System, Network, Device, Advanced, Recording, and Utilities.

Clicking any of these top level menu items will display submenu items and brief descriptions.



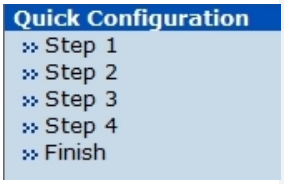
1.2. Admin Menu Structure

The following table shows the hierarchy of the Admin menu structure that we're going to deal with in this manual.

Category	Main Menu	Level 1 Sub-Menu	Level 2 Sub-Menu
Quick configuration	Step 1	n/a	n/a
	Step 2		
	Step 3		
	Step 4		
	Finish		
System Configuration	Server Name Setup	n/a	n/a
	Date & Time		
	Admin. Password		
	Access Control		
	User Registration		
Network Configuration	Network Configuration	n/a	n/a
	PPPoE Configuration		
	Network Ports		
	Bandwidth Control		
	View Network Status		

	Network Status Notify		
	IP-CCTV DNS™		
	Port Forwarding & UPnP		
	RTP/RTSP Setup	Built-in Module 0	
Device Configuration	Serial ports	Serial Input Mode Serial Output Mode Transparent Mode PTZ Mode	* for PTZ Mode, Built-in module 0 Built-in module 1
	Camera & Motion	Primary stream Secondary stream	
	DI/DO	Camera 1 Camera 2 Camera 3 Camera 4	n/a
	DI Status/DO Control	n/a	n/a
Advanced Configuration	Advanced Services	E-mail FTP(Buffed) FTP(Periodic) Sensor Notification Alarm Output	Camera 1 Camera 2
Utilities	System Log	n/a	n/a
	Save Configuration		
	Reboot		
	Factory Default		
	System Update		

2. Quick Configuration



In Quick Configuration, you will be able to set up many of the essential parts of the configuration in a simple manner without going into details. Selecting Quick Configuration gives you the menu as below. You can perform each setup by clicking the one you would like to configure.

2.1. Step 1: Changing Server Name

Click Server Name on System Configuration menu, then Server Name Setup windows will be displayed. See the section **0 Server Name Setup** in page **8** to see how to change the server name.

2.2. Step 2: Time Setup

Click Date & Time on System Configuration menu, then Local Date & Time Configuration window will be displayed. See the section **3.1 Date & Time** in page **8** to see how to set up.

2.3. Step 3: Network Setup

To make a connection to the Internet, it is required to figure out the type of the Internet service you're using. See the section **4.1 Network Configuration** in page **13** to see how to set up.

2.4. Step 4: IP-CCTV DNS

When IP-PVMZ Server is used in a Dynamic IP environment, it is required to utilize **IP-CCTV DNS** feature. See the section **4.7 IP-CCTV DNS Setup** in page **20** to see how to set up.

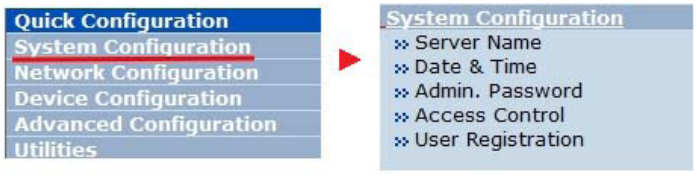
2.5. Finish

You need to save all the changes to the Flash Memory after finishing the configuration. The changes made to IP-PVMZ Server will be permanent by this step. Click **Finish** on **Quick Configuration** menu.

Click **Save Configuration** button. This will write the new settings to the system's flash memory. If you don't want to save them, click **Back** button.

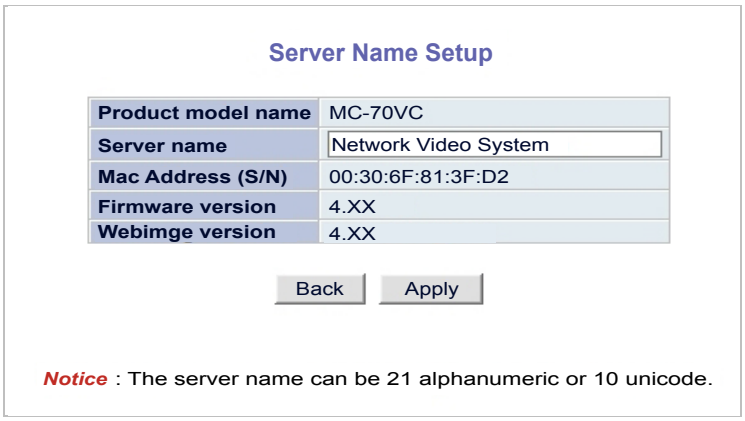
3. System Configuration Menu

When you click on **System Configuration** item on Admin Menu, the following sub menu will be displayed.



Server Name Setup

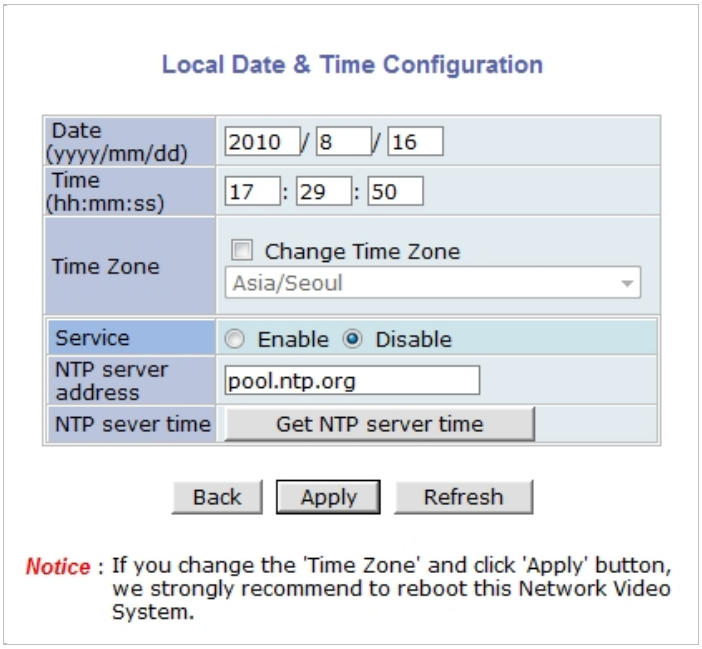
Click **Step 1** on **Quick Configuration**, then the following will be displayed and you will find out the system information such as model number of the IP-PVMZ Server, server name, MAC address (serial number), firmware version, and Webimage version.



As an administrator, you can change the name of the server name, but other values are not allowed to change. To change the server name, enter a new server name in the **Server Name** filed. You may use up to 21 alphanumeric or up to 10 Unicode characters. Tab or any other special characters are not allowed. Click **Apply** button to save the setting and it will take effect immediately.

3.1. Date & Time

Click **Step 2** on **Quick Configuration**. Fill the **Date** and **Time** fields with your local time and date information. If you're in a different time zone, put a checkmark on **Change Time Zone**, then select the correct region from the list box. To take the time zone change in effect, you need to click **Apply** button and reboot the system.

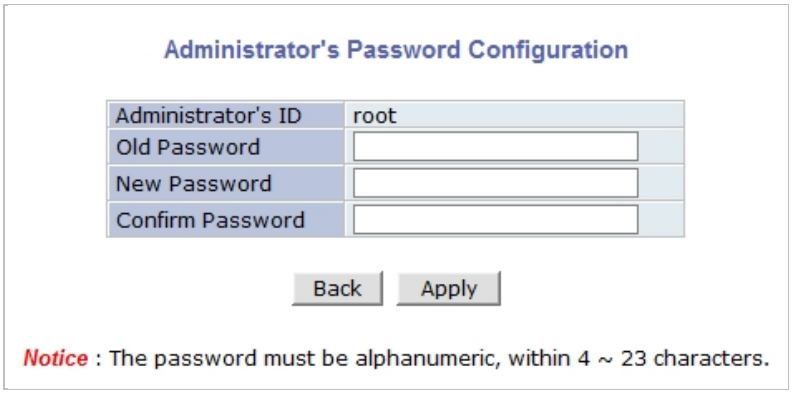


If you only changed **Date** and **Time** setting, simply click **Apply** button to take it into effect immediately. If you want to retrieve the exact current time from NTP server on the network, click **Get NTP Server Time** button. Clicking **Refresh** button will display the date and time retrieved from IP-PVMZ ® Server. Then click **Apply** button to save it.

Note: In order to retrieve Time and Date information from a NTP server, you need to put NTP server address in advance of setting up, such as pool.ntp.org.

3.2. Admin Password

To change the password for the administrator, click **Admin Password** on System Configuration menu.

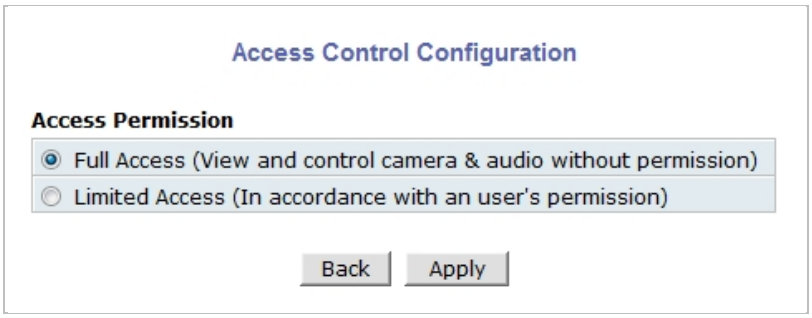


Default ID for admin account is fixed as "**root**" and not allowed to change. In **Old Password** field, enter the current password. In both **New Password** and **Confirm Password** fields, enter the same new password. The password must be between 4 and 23 alphanumeric letters. Click **Apply** button to put it into effect.

Because you have replaced the password with a new one, the existing network connection made with old password to IP-PVMZ Server is lost now. You will have to reconnect to the IP-PVMZ server using new password.

3.3. Access Control

Click **Access Control** on System Configuration menu. The following windows will be displayed.



From the **Access Permission** window, select either one you would like to use. Click **Apply** button to save the change.

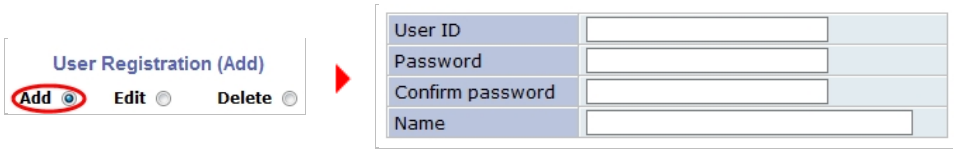
- **Full Access**: Any user can access the server and use all the features without limit.
- **Limited Access**: Only registered users can access the server and have limited privileges.

3.4. User Registration

You can add, modify, or delete users for your IP-PVMZ Server here. Once registered as **Limited Access** setting, the user can access the IP-PVMZ Server with some limited privileges.

3.4.1. Add

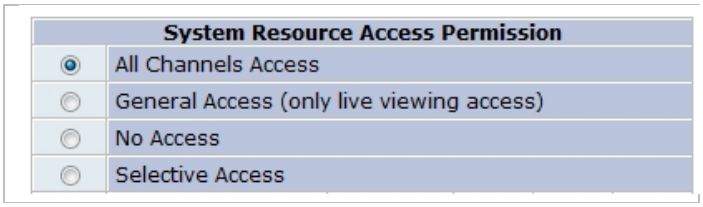
When **Add** is selected, you can add users and define their passwords, names, and access permission levels respectively. To add a user, click **User Registration** on **System Configuration** menu. Next, select **Add**, then the **User Registration (Add)** selection screen will be displayed.



Enter a user ID, which must consist of up to 23 alphanumeric characters. In both **Password** and **Confirm Password** fields, enter the identical password respectively. The password must be between 4 and 23 alphanumeric characters. In **Name** filed, enter the user's name that must be up

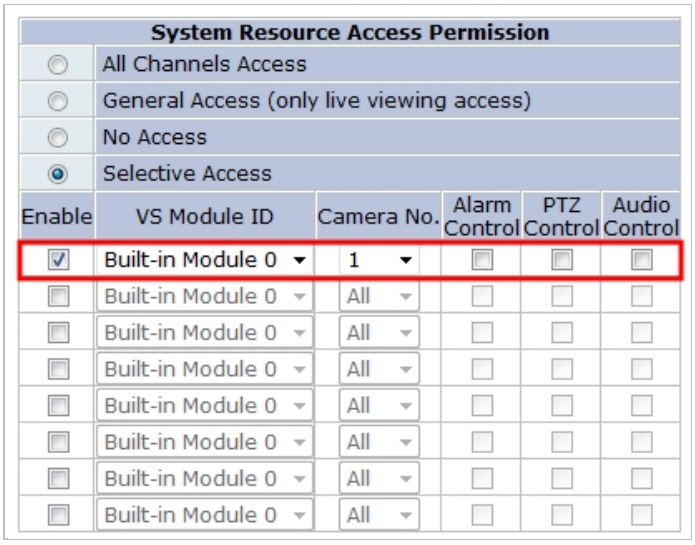
to 31 alphanumeric or 15 Unicode characters.

Now select one of the four items from **System Resource IP-PVMZ Access Permission**, which defines the permission level for registered users to the IP-PVMZ server.



- **All Channels Access**: User can use all the features except for Configuration in Admin Page.
- General Access (only live viewing access): User can use only Live View.
- **No Access**: User is not permitted of any of the features.
- **Selective Access**: User is allowed to use only the selected features. With this item selected, user can now configure the details under the menu.

IP-PVMZ Server can have multiple VS modules registered in it. When user ticks on any of **Enable** checkboxes, other fields in that row are enabled to select.

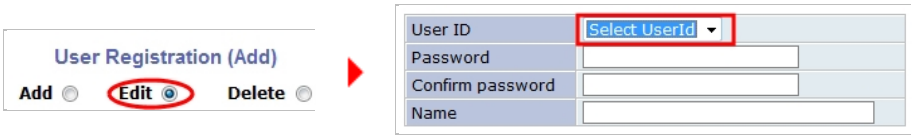


- **VS Module ID**: The registered user can select VS Modules that are available. (VS Module is a network device that has been registered in IP-PVMZ ® Server)
- **Camera No.**: Among the cameras of VS Module, select one to set up. (between 1 and 4)
- **Alarm Control**: Determine if Alarm control is to be allowed.
- **PTZ Control**: Determine if PTZ Control is to be allowed.
- **Voice Control**: Determine if Audio Control is to be allowed.

After finishing the registration process, click **Apply** button to add the user.

3.4.2. Edit

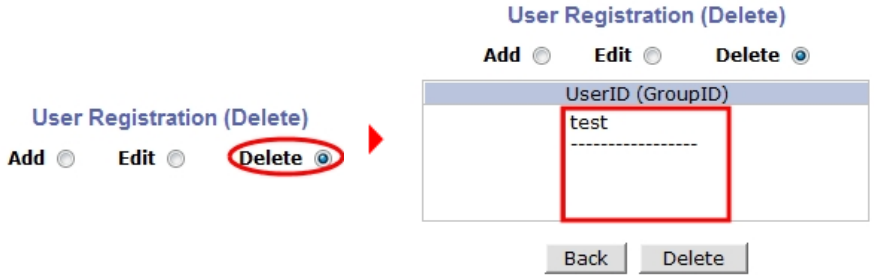
To edit a user account, select **Edit**. In this part, you can modify the existing user's name, password, and access permission. User ID is not allowed to change. Once selecting a user ID for edit, the usage is the same as in **Add** section.



To see existing users, click **Select UserId**, and select a user to be edited. Then change the password, name, or access permission, and click **Apply** button to save the setting. Setup of Access Permission can be done the same way as in **Add** section.

3.4.3. Delete

To delete an existing user, select **Delete**.

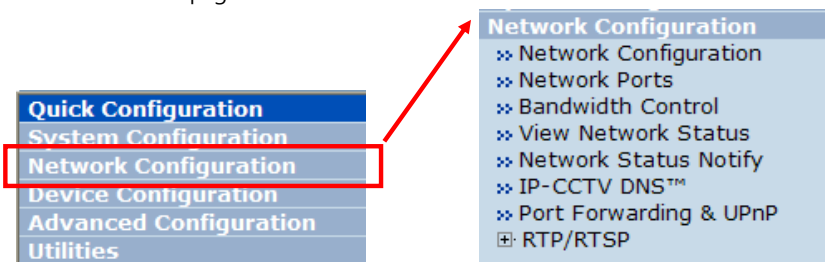


From the list of the users, select a user to delete. Click **Delete** button to confirm the deletion.

4. Network Configuration

According to how to assign IP address, Ethernet-based Network feature is divided by static IP, dynamic IP(DHCP), PPPoE. For wireless LAN, additional configuration is necessary to have a connection with wireless AP.

In the case of wireless models, users have to choose between wired or wireless connection. In other words, both connections can't be used at the same time. The way how to choose wired or wireless depends on whether wired LAN cable is plugged into the product or not. When LAN cable is plugged more than 5 sec, wired LAN is activated for data transmission. If LAN cable is unplugged more than 5sec, wireless LAN is activated. If PPPoE is selected by user, wired LAN will be activated regardless of condition of LAN cable. For network configuration, select Network configuration from Admin page.

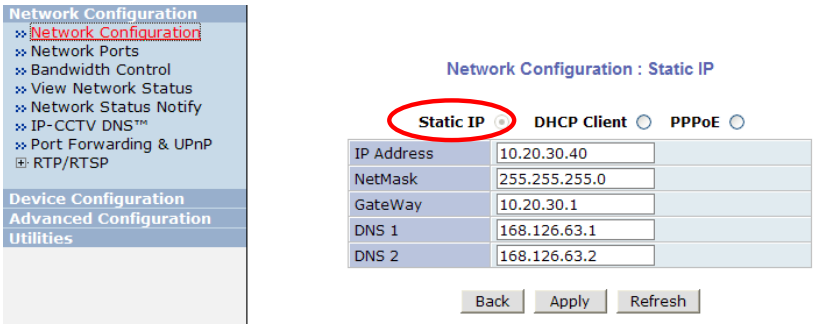


To make a connection with internet, it is required to figure out the type of the Internet service you're using. Depending on the service type, the network configuration can be in any of **Static IP**, **DHCP Client**, or **PPPoE**. You need to set up the IP-PVMZ Server according to your network type.

4.1. Network Configuration

4.1.1. Static IP Configuration

Selecting Network Configuration under Network configuration will show variables. Below picture is for products without wireless LAN.



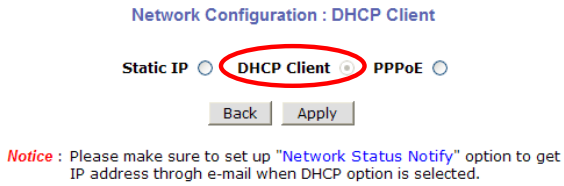
(Wireless models will show additional options. Please refer to 4.2 wireless configuration)

For static IP, select static IP and input values for IP address, NetMask, Gateway, DNS1, DNS2 and click apply for saving settings. After **apply**, program will ask closing web browser for updates, which will take 20~30 seconds. If "**Back**" button is pushed while configuration, all values will be

discarded. If "**Refresh**" button is pushed, the program will load previous values.

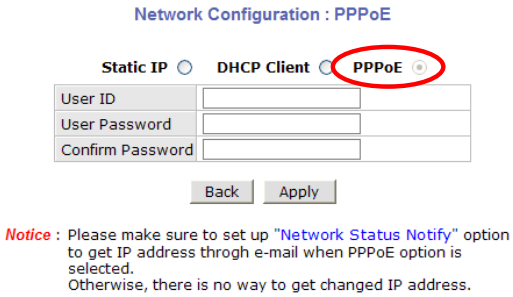
4.1.2. DHCP Client Configuration

For DHCP, DHCP server must exist in the network environment. Select **DHCP Client** from Network Configuration, click **Apply**.



4.1.3. PPPoE Configuration

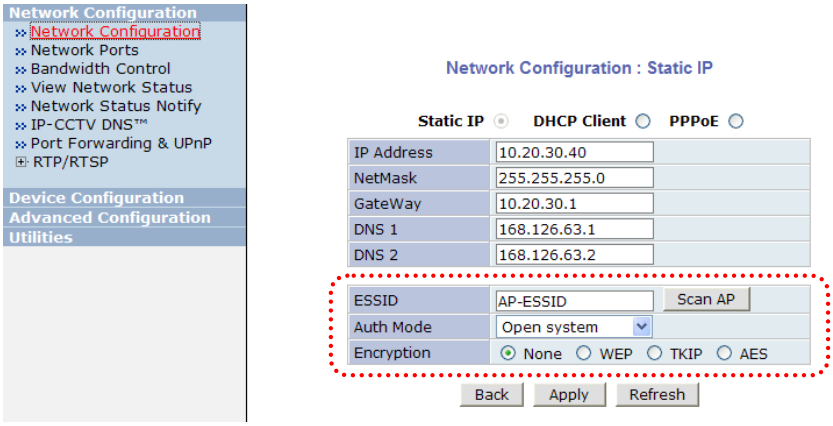
PPPoE is used to connect IP-PVMZ products to PPPoE modem provided by ISP. Since PPPoE needs verification, ID and password are necessary to access network. Type ID and PW.



4.2. Wireless LAN Configuration

To use wireless LAN function, detailed information of AP(Access Point) such as ESSID, Auth Mode, Encryption, etc should be exactly provided. Please make sure that wired LAN and wireless LAN will work exclusively.

Static IP and DHCP client will be available for wireless LAN. When PPPoE is selected, wireless LAN is disabled. Even though LAN cable is unplugged, wireless LAN won't be enabled. Wireless LAN models will show additional options under Network Configuration menu.



4.2.1. ESSID

ESSID(or SSID) stands for an dedicated name of AP(Access Point). Whether typing name of AP manually or select from results after scanning nearby AP.

To scan nearby AP, click **Scan IP**, which will pop up a new window. After a few seconds, results will be shown. Click desired AP from list.

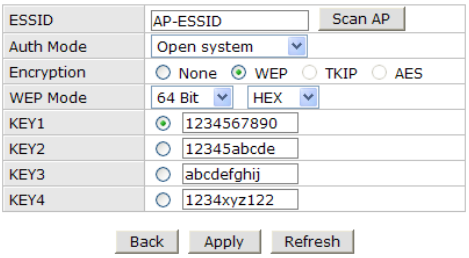
Please note that APs that hides ESSID information for security won't be scanned.

4.2.2. Authentication Mode & Encryption

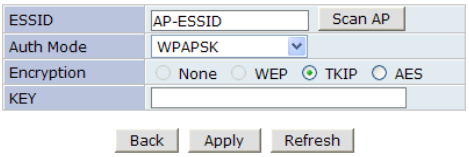
Every AP has authentication process for security reasons. IP-PVMZ products support "Open, Shared, WPAPSK, WPA2PSK" authentication modes. Per each modes, encryptions such as WEP, TKIP, AES can be set. Relationships between authentication and encryption are listed below.

Authentication Mode	Supported encryption
Open, Shared	N.A or WEP
WPAPSK, WPA2PSK	TKIP, AES

For WEP, 64bit or 128bit mode can be selected and length of encryption key will be different. For WEP 64bit, 5 digits of ASCII or 10 digits of hex characters will be required. For WEP 128bit, 13 digits of ASCII or 26 digits of hex characters. Among 4 keys, appropriate key should be chosen according to key of AP.



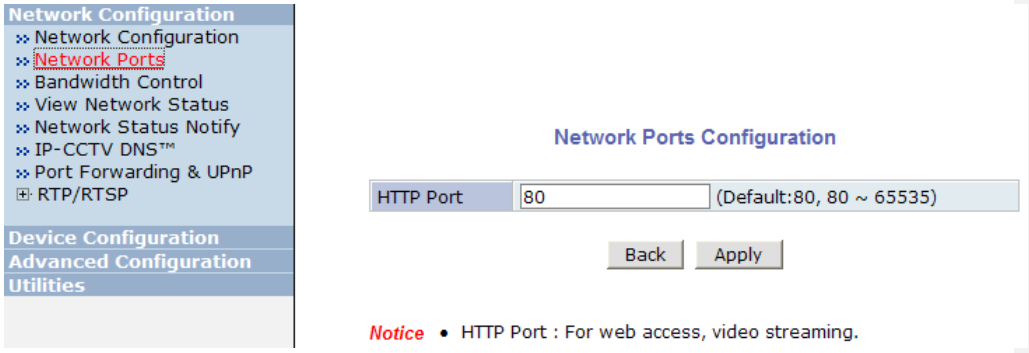
For WPASK or WPA2PSK, TKIP and AES can be available and the max length of encryption key is 63 digits of ASCII.



4.3. Network Ports

In this configuration, you set up the HTTP port for IP-PVMZ Server to communicate with the Client PC. HTTP Port is the network port that is used when a Client PC connects to the IP-PVMZ Server's Web page. It can be assigned between 80 and 65535 and the default value is 80.

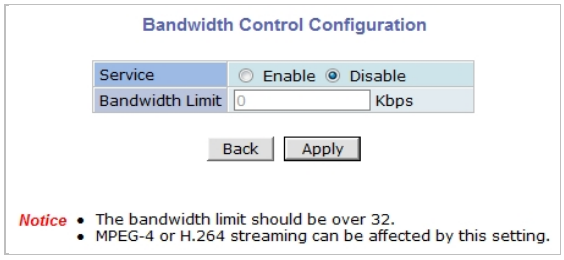
> *Note: If the HTTP port number is changed to other value than default (80), make sure the new HTTP port number goes together with the IP-PVMZ Server's Internet address. For example, when IP-PVMZ's IP address is 192.168.1.00 and set the HTTP port to 8080, you will have to enter http://192.168.1.100:8080 to connect to the server.*



4.4. Bandwidth Control Configuration

Bandwidth control is for limiting maximum network traffic. If it is enabled with certain limit, maximum data size transferred from IP-PVMZ products won't exceed bandwidth limit set by users. If transferred data is exceeded, part of data will be randomly lost

If multiple users try to access a IP Camera which bandwidth control is enabled, users connected to the IP Camera will share network bandwidth limit.

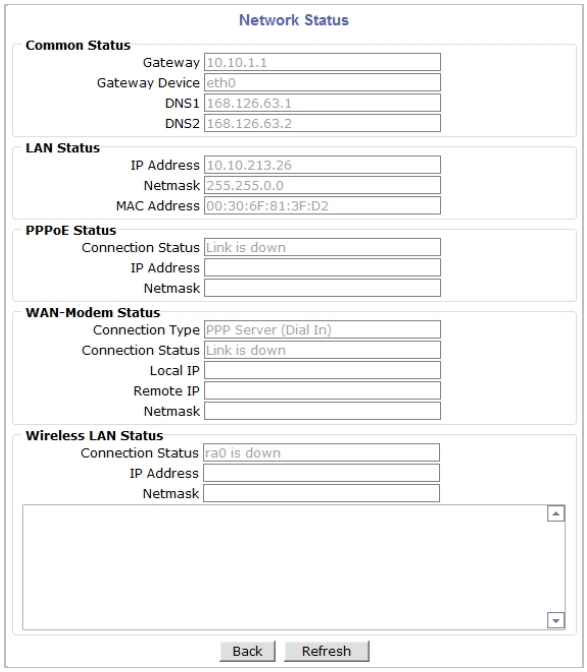


Note: This bandwidth control feature works fairly well in M-JPEG video transmission. But, for H.264, dropping data packets may cause low quality of video, so it is recommended to utilize CBR and frame rate control instead of bandwidth control for MPEG-4 and H.264 video.

Note: Network Bandwidth control is managed by IP-PVMZ Server and it drops any data packets if required, thus you may experience slow connection to the server when the feature is enabled.

4.5. View Network Status

This menu shows network status of IP Cameras. Wireless LAN status will be added for wireless models.



4.6. Network Status Notify

This feature helps to send updated network status information to registered email address if any changes happen. This function will work under DHCP or PPPoE.

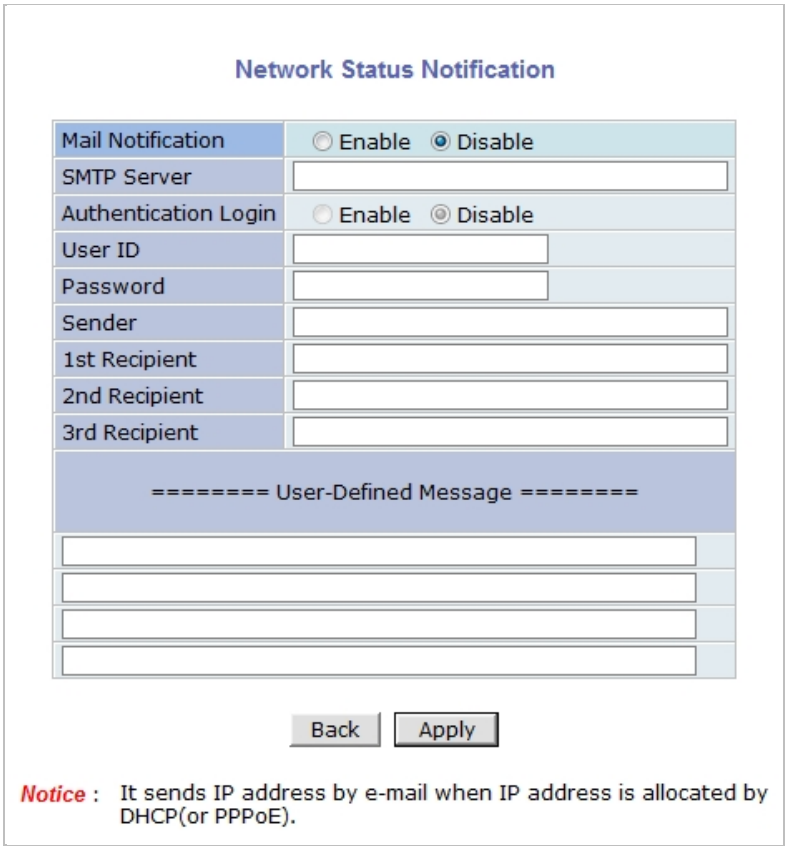
If **Network Status Notify** is set to **Enable**, IP-PVMZ Server's network status will be emailed to a specific person in case of the following events:

- When it is set to Dynamic IP on Network Configuration menu, and the IP-PVMZ server has been given a new dynamic IP address and connected to the network.

Or,

- When it is set to PPP Client on WAN-Modem menu, and the IP-PVMZ server has been connected to the network with ISP or PPP server.

To configure, click **Network Status Notify** on Network Configuration menu. The following window will be shown.



First, select **Enable** to use the feature. Then enter the address of the SMTP server which is needed for email service. If your SMTP server requires a user ID and a password for authentication, you will have to get them from ISP or network admin. Enter the ID and password.

In **Sender** field, enter your email address or other meaningful words that will show the message was sent from the IP-PVMZ server as a notification. Now enter the email addresses of the recipients in the **Recipient** fields, up to 3 persons. In the **User-Defined Message** box, you may put a message to explain why the message was sent. After finishing the setup, click **Apply** to save settings.

Mail Notification	**Enable**: Send email **Disable**: Do not send email
SMTP Server	SMTP Server address for email service
Authentication Login	**Enable**: user ID and password are required for SMTP server **Disable**: user ID and password are not required
User ID	User ID for SMTP server
Password	Password for SMTP server

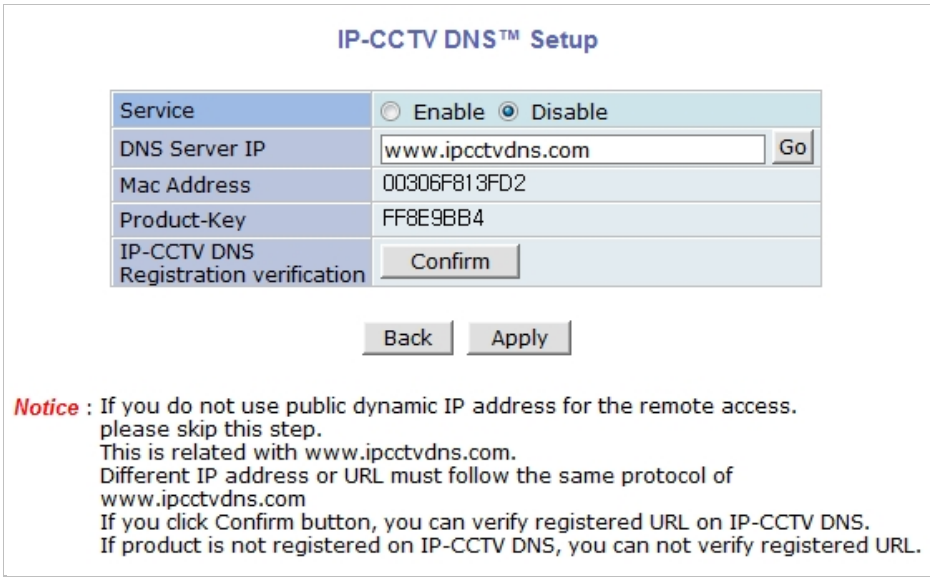
Sender	Email address of Sender
1st / 2nd / 3rd Recipient	Email Addresses of the Recipients (up to 3 persons)
User Defined Message	Message to be included in the Notification email

4.7. IP-CCTV DNS Setup

IP- CCTV DNS service provides a static & public domain name to help users access IP-PVMZ products even though their IP address is changed or they are used in local network. For proper function of IP-CCTV DNS service, products should be accessible through internet.

To use IP-CCTV DNS, users have to create ID from IP-CCTV DNS server and register IP-PVMZ products with MAC address and Product Key. Those information can be found from IP-CCTV DNS Setup menu. **Enable** service and click **Apply**. If it is configured properly, you can check the result by clicking **Confirm** button.

.



Note: Refer to IP-CCTV DNS™ User's Manual for further details of the configuration.

4.8. Port Forwarding & UPnP

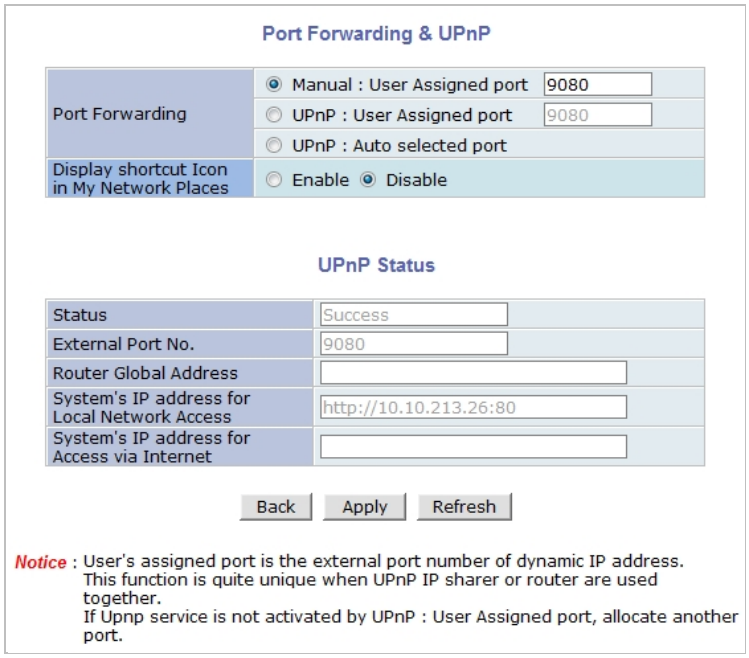
UPnP(Universal Plug and Play) is a kind of network protocol to help users to find and configure network products in same local network area. Port forwarding is to assign a certain network port to a network product Proper so as users can access it from outside of Local Area Network. Generally, port forwarding can be configured from network router.

UPnP port forwarding is made up with finding available network port, assigning it to a IP-PVMZ product and reporting overall network configuration of a IP-PVMZ product to IP-CCTV DNS server. Users have to register products to IPCCTVDNS server and IP-CCTV DNS service should be enabled.

There are 3 options in UPNP Port Forwarding.
Firstly, **Manual: User Assigned Port** is used when users can access network router(hub) and manually assign available network port to IP-PVMZ products. In this case, users have to type already-assigned network port under **User Assigned port**

Secondly, **UPnP: User Assigned Port** is used when users want IP-PVMZ products to configure port forwarding menu of network hub with user-assigned network port. If it fails, try to change user-assigned port

Lastly, **UPnP: Auto Selected Port** is used to let IP-PVMZ products deal with all network configuration automatically..
Please notice that network router should support UPnP Port Forwarding and there is a limit for maximum UPnP devices. If it is properly configured, results will be appeared under **UPnP status**.



메모 [z1]:

4.9. RTP/RTSP Setup

RTSP (Real-Time Streaming Protocol) is a protocol to transfer video and audio stream over the network. Any application supporting Standard RTSP can be used for IP-PVMZ server. Quick Time

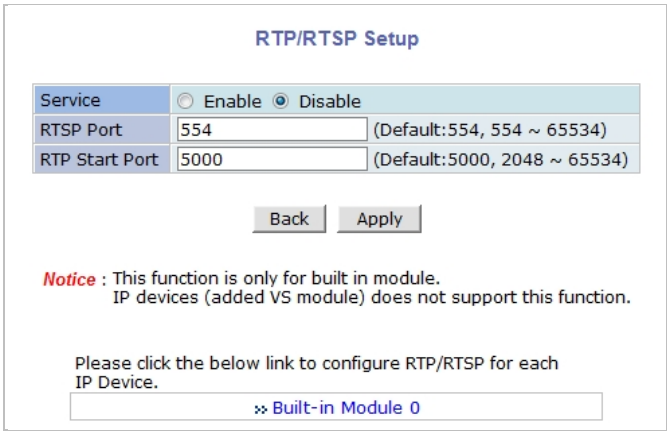
Player or VLC program can be used for this, but it may not be supported in the environment within firewall. There are two types of usages, one for Unicast address condition and the other for Multicast address condition.

For Unicast Address:

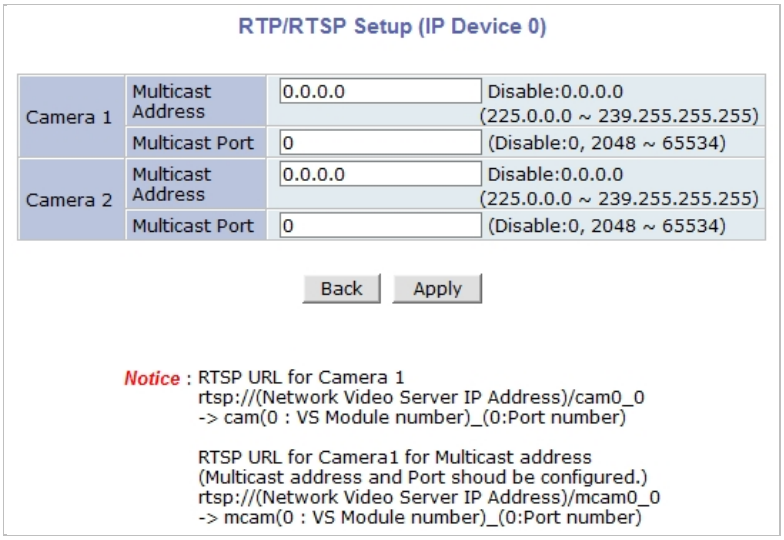
Use "rtsp://network video server ip address/cam0_0". If there are multiple channels, use cam0_x, x (0~3) with each number applied. If there are multiple modules, use camx_0 x (0 ~ 3) with each module number applied.

For Multicast Address:

Use "rtsp://network video server ip address/mcam0_0". If there are multiple channels, use mcam0_x, x (0~3) with each channel number applied. If there are multiple modules, use mcamx_0 x (0 ~ 3) with each module number applied.



Service	**Enable**: Start RTSP service **Disable**: Stop RTSP service
RTSP Port	In normal case, use default port number 554 to connect to RTSP service. If not using port 554, enter the port number you want to use. e.g.) port number 445==> rtsp:// network video server ip address:445/cam0_0
RTP Start Port	The starting number of the port for video transfer. Each time video transfer connection is made, the port number also increases.



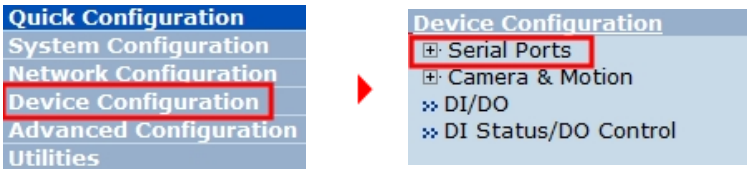
Multicast Address	Address for multicast video transfer. The multicast address 0.0.0.0 is for stopping multicast.
Multicast Port	Port number for viewing the video with a multicast address

5. Device Configuration

You set up the connection between IP-PVMZ Server and the camera in this part of configuration. That includes Video data, external devices, Input / Output, Alarm control, and etc.

5.1. Serial Ports

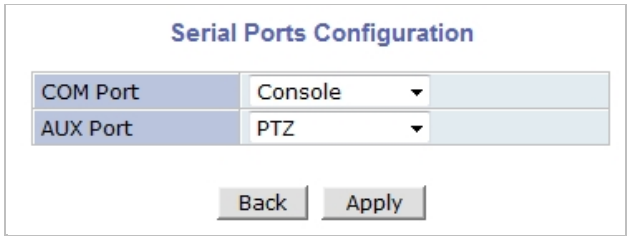
There are two serial ports configurable in the system, COM and AUX. COM port is primarily used for console, and AUX is for PTZ control, but they both can be used for other purposes when necessary.



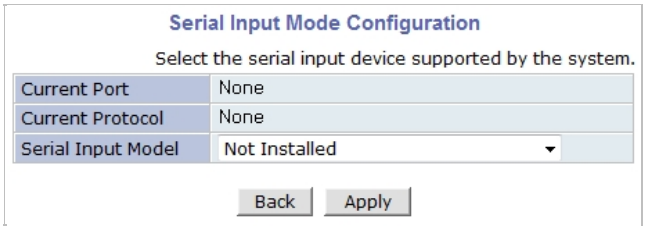
5.1.1. Serial Input Mode

When serial ports are in **Serial Input Mode**, IP-PVMZ Server can be triggered by the external sensors to send images from the camera by email, or FTP. It can also activate **Alarm Output** by input from sensors inputs. For example in a real life, if a dam's water level comes to a pre-defined value, the server can send the images of the dam's water level meter from cameras. Another example is, when a car running on highway exceed the speed limit, it can send the picture of the car.

To configure, click **Serial Ports** on Device Configuration. In **COM Port** or **AUX Port**, select **Serial Input** and click **Apply** button to apply the change. The system will reboot then.



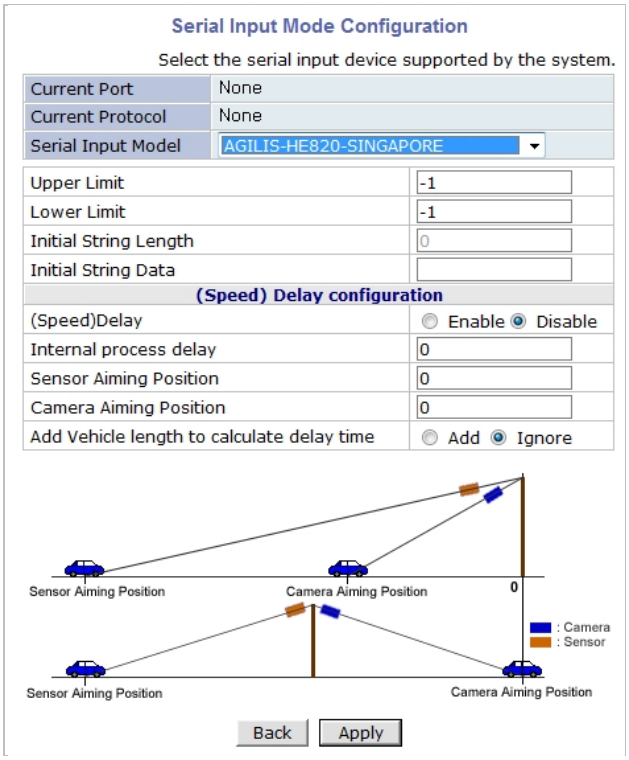
After rebooting, open the **Serial Ports** window in **Device Configuration** menu again. Select the **Serial Input Mode**, then the **Serial Input Mode Configuration** windows will be displayed as shown below.



- **Current Port**: This shows the name of the port currently configured.
- **Current Protocol**: This shows the protocol being used. (only RS-232 can be displayed)
- **Serial Input Model**: You can select the sensor's model number to use for Serial Input.

> *Note: If additional sensors need to be added, it will require installation of the device drivers.*

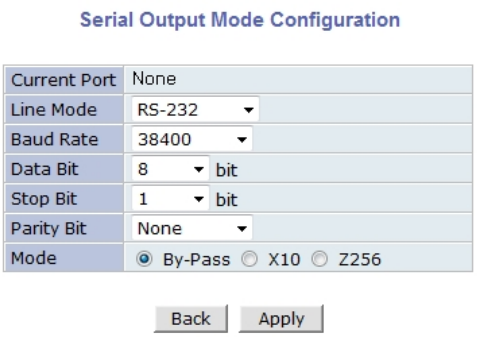
The following example is when a speed sensor, AGILIS-HE820-SINGAPORE, is selected.



- **Upper Limit**: The highest value in the range to assign
- **Lower Limit**: The lowest value in the range to assign
- **Initial String Length**: The length of initial string from sensor
- **Initial String Data**: The initial string from sensor
- **(Speed) Delay**: select **Enable** if sensor input needs delay
- **Internal process delay**: The amount of delay for sensor input
- **Sensor Aiming Position**: The position for sensor to aim
- **Camera Aiming Position**: The position for camera to aim
- **Add Vehicle length to calculate delay time**: The length of vehicle for applying delay time

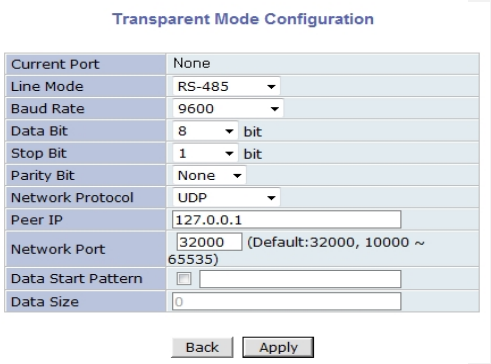
5.1.2. Serial Output Mode

Using Serial Output Mode, you can send UART device commands to IP-PVMZ ® Server in order to control PTZ devices, Multiplexer, Access control box, X10 Protocol, z256 protocol by RS-232 or RS-485/422 communication. In the picture below, serial output mode can be selected among By-Pass, X10, or Z256.



5.1.3. Transparent Mode

When there are two IP-PVMZ Servers present on the network, they can act like a transparent interface between two different UART devices so that the communication between the UART devices can be made transparently without a flaw.

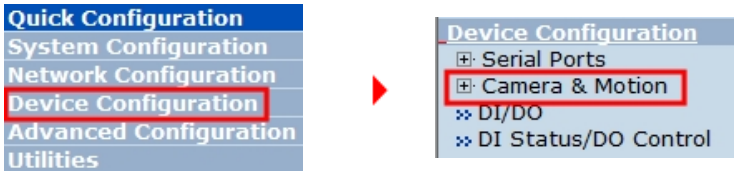


- **Line Mode**: The type of communication protocol
- **Baud Rate**: Data transfer rate
- **Data Bit**: The number of bits in data
- **Stop Bit**: The number of stop bit
- **Parity Bit**: Parity bit characteristic
- **Network Protocol**: The type of protocol used to send data
- **Peer IP**: IP address of other IP-PVMZ server
- **Network Port**: Network port number of the server
- **Data Start Pattern**: Data start pattern (Not used if unchecked)
- **Data Size**: Data size in single transfer (Not used if unchecked)

5.2. Camera & Motion

This menu is used to set up the selection of video format, data added to video data, encoding speed, audio control, image resolution, video quality, motion detection, and etc.

Click **Camera & Motion** on Device Configuration menu. The configuration menu will be displayed, and it may be a little different between each IP-PVMZ model.



Watermark: The technique that imposes a particular pattern or code into images. Watermarking is used for identifying counterfeit or illegal copy.

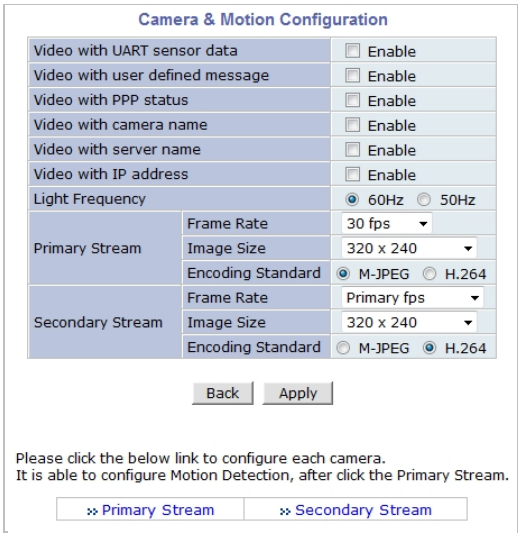
M-JPEG: This format requires much higher network bandwidth than MPEG-4 compression. But because of its higher quality of still image, it is adequate for detailed reviewing of stored video.

MPEG-4: In this format, each frame data is related to other nearby frames. For this reason, it provides much higher compression ratio than M-JPEG and is adequate for video transfer. However, if network condition is not very good and having dropped frames in video data, the video quality can be relatively low. With IP-PVMZ server, you can set the number of P-frames in the video which is independent still images between I-frames.

Note: For Dual Stream products, the most of parameters are dependent on primary stream value.

5.2.1. Camera & Motion

You can configure the video data format and other information to be contained in it.



FW-1170

- **Video with UART sensor Data**: If **Enabled**, video data will contain UART sensor data from COM port.
- **Video with user defined message: If Enabled, v**ideo **data wi**ll contain the user-defined data. (Reserved Field)
- **Video with PPP status**: If **Enabled**, video data will contain PPP connection status.
- **Video with camera name**: If **Enabled**, video data will contain the camera name.
- **Video with server name**: If **Enabled**, video data will contain the server name that you defined.
- **Video with IP address**: If **Enabled**, video data will contain the IP address of the video server.
- **Light Frequency**: Used for Flickering Reduction. Select the electric power frequency used in the region, either 50 or 60Hz.
- **Frame Rate**: For Primary Stream, this is the number of frames compressed in every second. You can control the network traffic with this parameter. For Secondary Stream, it can be set to manner of 1/2, 1/4, 1/8... of the primary stream.
- **Image Size**: Select the resolution of each channel's video
- **Encoding Standard**: Select the compression method of each video, either M-JPEG or H.264 format. It is not allowed to set both channels to M-JPEG.

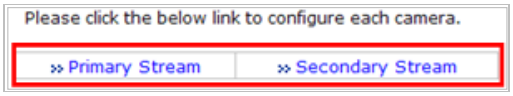
Below is the table of images sizes.

Video Format	SXGA	D1	CIF	QCIF
NTSC	-	704 x 480	352 x 240	160 x 112
PAL	-	704 x 576	352 x 288	160 x 144
VGA	-	640 x 480	320 x 240	160 x 112
1.3M Pixel	1280 x 1024	640 x 480	320 x 240	160 x 112

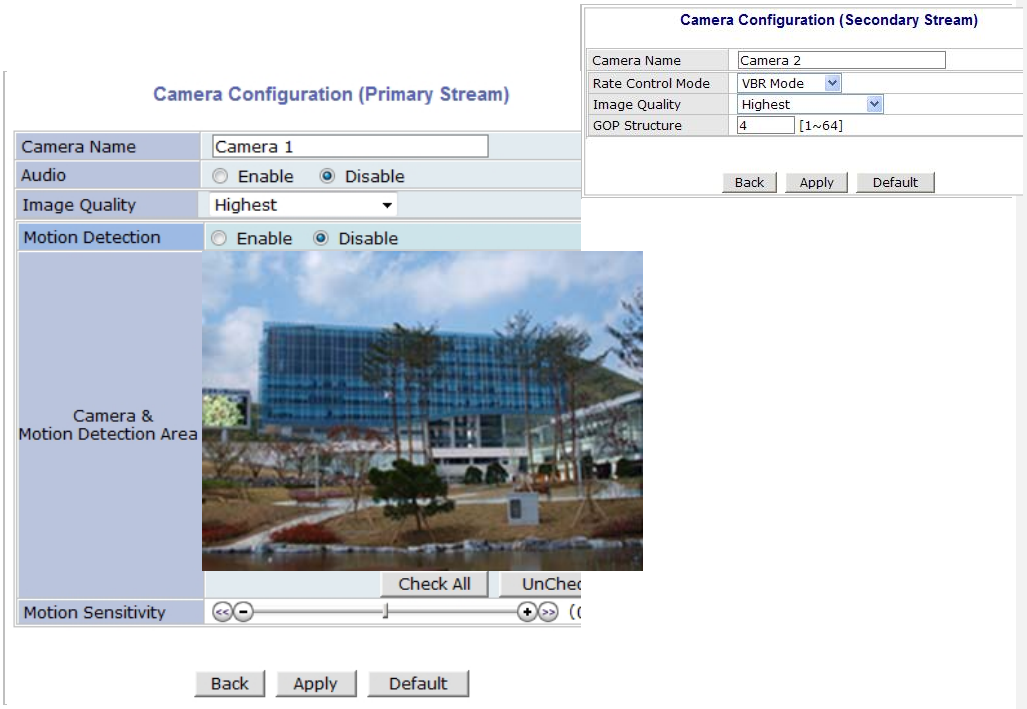
To save the setting, click **Apply** button.

Camera Configuration

On the lower part of **Camera & Motion Configuration** menu, select a channel to configure.



In the example shown below, Primary Stream is set to M-JPEG, and Secondary Stream set to H.264 for compression format. Enter detailed parameters of the camera selected here.



Primary Stream (M-JPEG)

Secondary Stream (H.264)

When the image sensor is VGA CMOS/CCD or 1.3M CMOS/CCD, there will be no Hue, Saturation, Contrast, or Brightness setting items shown. Only with NTSC or PAL will those parameters be configured.

- **Camera Name**: Enter the name of the channel in up to 21 alphanumeric or up to 10 Unicode letters.
- **Audio**: Select if Audio function is to be used (applies to Primary Stream only). IP-PVMZ Server provides 2-way audio streaming by combining microphone input with video data. Users can listen to the streamed audio on PC speakers.

Image Quality Setup

<table>
<tr><td rowspan="3">H.264</td><td rowspan="2">Rate Control Mode: VBR (Variable Bit Rate) Video frames are encoded with selected image quality and GOP. Encoded frames have different data size from each other.</td><td>Image Quality: one of 6 quality levels (Low Compression / Highest / High Normal / Low / Lowest)</td></tr>
<tr><td>GOP Structure: Distance between I-Frames. That is filled with P-frames.</td></tr>
<tr><td rowspan="2">Rate Control Mode: CBR (Constant Bit Rate) Video frames are encoded with selected image quality and GOP. Encoded frames have the same data size as other frames. Due to the constant bit rate, it has better stable transmission performance.</td><td>Bit Rate Control: Total number of Bits encoded per second. The higher Bit Rate, the better image quality. Can be set between 32kbps and 2Mbps.</td></tr>
<tr><td>GOP: Distance between I-Frames. That is filled with P-frames.</td></tr>
<tr><td>M-JPEG</td><td>-</td><td>Image Quality: one of 6 quality levels (Low Compression / Highest / High Normal / Low / Lowest)</td></tr>
</table>

Low Compression	**Highest**	**High**	**Normal**	**Low**	**Lowest**

In **Image Quality** level setup, select the left for higher image quality, but it requires higher network bandwidth. Selecting the right requires lower network bandwidth, but gives decreased image quality.

- **Color Mode**: Select either Color or Gray (Primary Stream only)
- **Hue**: Set the color of image between -100 and 100 (Primary Stream only)
- **Saturation**: Set the intensity of the image between -100 and 100 (Primary Stream only)
- **Contrast**: Set the contrast of the image between -100 and 100 (Primary Stream only)
- **Brightness**: Set the brightness of the image between -100 and 100 (Primary Stream only)
- **Motion Sensitivity**: This value sets how sensitively the motion detection works for the

> *Note: Color Mode, Hue, Saturation, Contrast, Brightness items are displayed only when the input video signal is NTSC or PAL.*

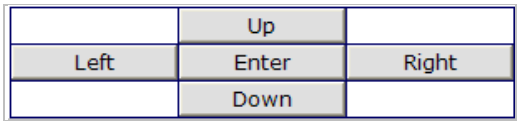
  motion detection functionality. It can be between –100 and 100 while 100 is the most sensitive.
- **Motion Detection**: This decided whether the Motion Detection is to be used. If **Enable** is selected, you can set which part of the camera image the Motion Detection does functioning. This only works in Primary Stream mode.

After configuration is finished, click **Apply** button to save the setting. If you click **Default** button,

the entire configuration will be reset to the original values.

5.2.2. Built-in Camera Control

With this feature, you can send control signals to a camera when it supports functions such as AGC, ELC, AWB, etc. The OSD control window has four buttons of **Up**, **Down**, **Left**, **Right**, and **Enter** button.



On the center is the **Enter** button, and when it's pressed it goes to **Menu Mode** so that you can see the status of the menu. Moving on the menu items is done by **Up** and **Down** buttons, and the value change is done by **Left** and **Right** buttons.

SETUP Menu	Function	Description
LENS	MANUAL / DC / VIDEO	IRIS Control type of the lens mounted
SHUTTER	ESC / MANUAL / FLK	MANUAL : 1/60(50) - 1/120,000 sec, x2 - x128
WHITE BAL.	ATW / AWC / MANUAL	ATW: 1,800 10,500°K *AWC: ONE PUSH MANUAL: Adjustable between Red and Blue.
BACKLIGHT	OFF / LOW / MIDDLE / HIGH	Backlight compensation
AGC	OFF / LOW / MIDDLE / HIGH	Brightness can be adjusted.(1 - 70)
DNR	OFF / LOW / MIDDLE / HIGH	DNR is not functional if AGC is OFF.
SENS-UP	OFF / AUTO	SENS-UP is not functional if AGC is OFF.
SPECIAL	(* Refer to the table below)	-
EXIT		Exit from Menu Mode and save settings.

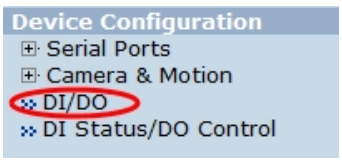
Special Menu	Function	Description
CAMERA ID	(Name of the camera)	Use up to 15 Alphanumeric and space
COLOR	AUTO / ON	**AUTO**: Automatic switch of Day & Night Mode (Day-time: Color Mode; Night-time: B/W mode) **ON**: Operate in COLOR mode always.
SYNC	INT / LL	**LL**: Adjustable between 0 - 359° **Trigger Signal**: Auto Sensing.
Motion Detection	OFF / ON	**ON**: Define 4 adjustable positions and sizes. When any motion is detected, it displays **MOTION DETECTED** on the screen.

PRIVACY	OFF / ON	**ON**: Define 4 positions, sizes, contrasts.
MIRROR	OFF / ON	Mirroring (Horizontal Image reversing)
SHARPNESS	OFF / ON	Adjustable between 0 - 31.
RESET		Reload the factory default condition.
RETURN		Return to SETUP menu after saving settings.

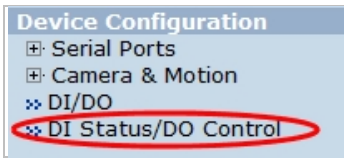
5.3. DI (Sensor Input) / DO (Alarm Output)

Select **DI/DO** from **Device Configuration** menu to configure Sensor Input and Alarm Output. After the setting up, select **DI Status/DO Control** on Device Configuration menu to configure the behavior of those Input and Output ports.

DI/DO Setup

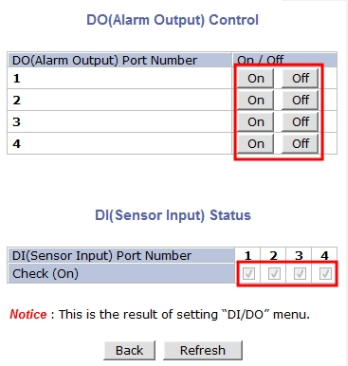


DI/DO Control



DI/DO functionality can be set to either Normal Open or Normal Closed type as follows.

- **Normal Open Type**: Normal is **OPEN**, and goes **CLOSED** when triggered by an event.
- **Normal Close Type**: Normal is **CLOSED**, and goes **OPEN** when triggered by an event.



Note: Make sure the type of the sensor and use it correctly to the type. If a Sensor Input is not used, it must be set to Normal Open Type to avoid a false input.

5.3.1. DI/DO

DI/DO Setup

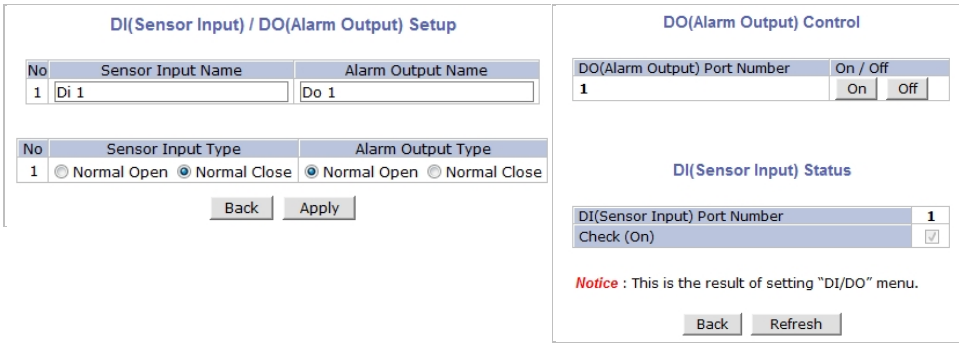
You can define **Sensor Input Name** and **Alarm Output Name** as you want, which should be up to 31 alphanumeric or up to 15 Unicode characters.

DI/DO Control

These IP-PVMZ models have 1 Alarm output port and they act like a push button. When you click

On button, it is essentially like the push button pressed. When you click **Off** button, it is like the push button not pressed.

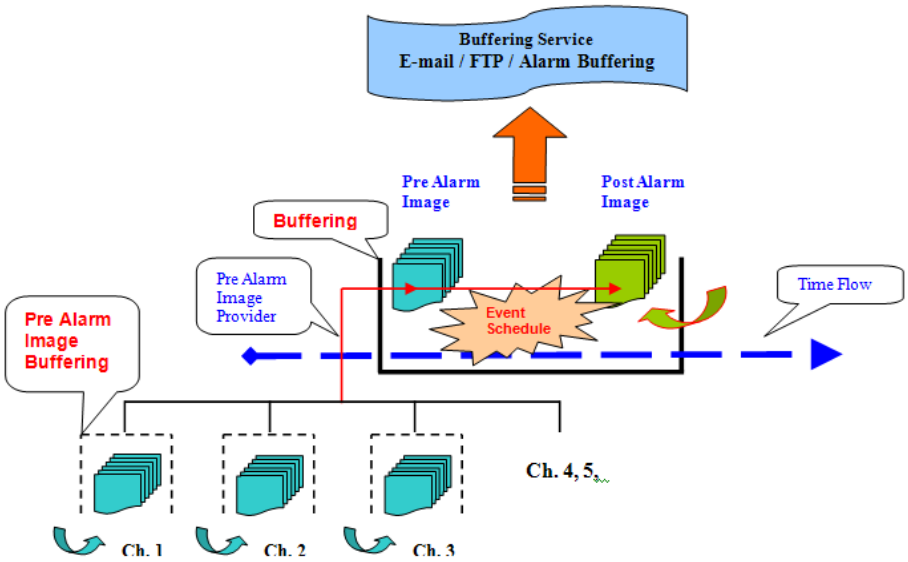
The status of Sensor Input can be monitored through DI. When the checkbox is marked, that means the Alarm is activated. When it's not marked, then the Alarm is not activated.



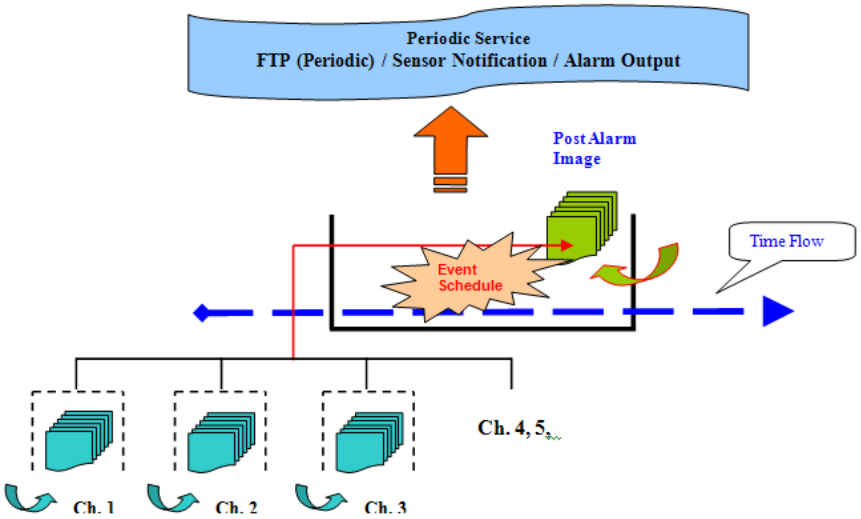
6. Advanced Configuration

IP-PVMZ can be configured to start and stop certain pre-defined services by scheduling, event, or conditions. It also has ISENS feature, which is a way of integrating IP-PVMZ with CMS software. You can set up the advanced services in **Advanced Configuration** menu.

There are two types of advanced service, one is **Buffered Service** and the other is **Periodic Service**. In Buffering Service, a series of images are continuously being stored in a buffer memory of server for a certain period of time. When the server is triggered by an event or schedule, the images or alarm status just before and after the event/schedule are reported to you by email or buffered FTP services.



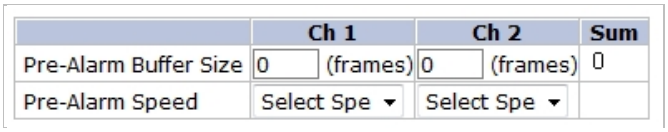
In Periodic Service, only the image, alarm/sensor status after an event/schedule is reported to you upon the server is triggered.



6.1. Advanced Services

Pre-Alarm buffer size and buffering speed can be defined here.

- **Pre-Alarm Buffer Size**: You can set the buffer size which will store the images before event. The unit is in frame, and each channel can be set with different values. The total number of frames for Pre-Alarm Buffer and Post-Alarm Buffer is limited to 10 frames.



- **Pre-Alarm Speed**: You can set the buffering speed. If it's set to Fastest, the server will store images as fast as it can. Each cannel can be set with different values.

This configuration applies to E-mail and FTP (Buffered), and click **Save** button to apply changes.

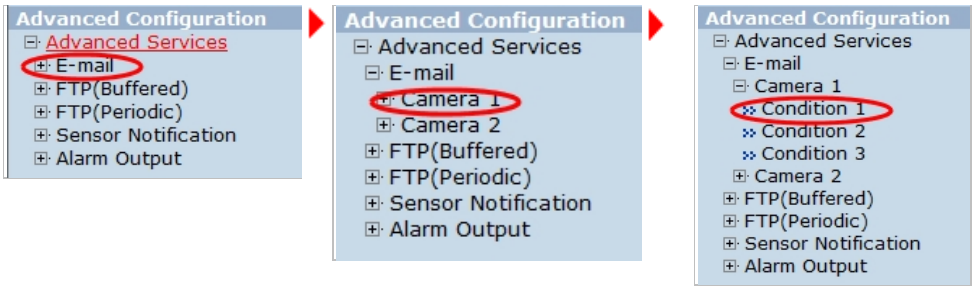
E-mail	Configuration of E-mail service to send pre-post alarm images.
FTP(Buffered)	Configuration of ftp service to send pre-post alarm images.
FTP(Periodic)	Configuration of ftp service to send recent images periodically according to service conditions.
Sensor Notification	Configuration to notify sensor status to predefined IP address.
Alarm Output	Configuration of alarm output duration according to service conditions.

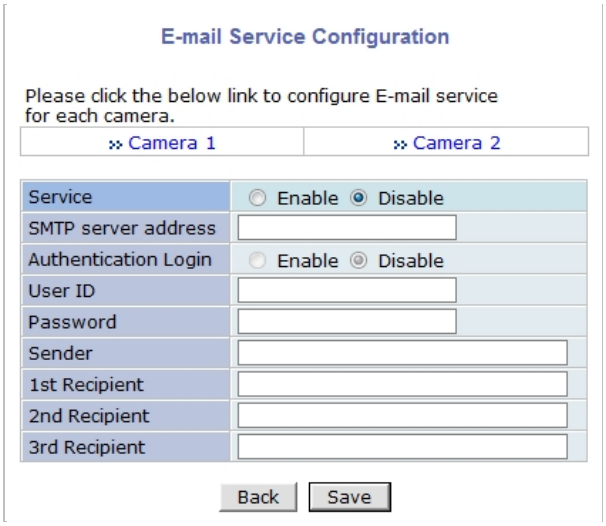
- **E-mail**: Set up Email Service configuration
- **FTP (Buffered)**: Set up FTP (Buffered) Service configuration

- **FTP (Periodic)**: Set up FTP (Periodic) Service configuration
- **Sensor Notification**: Set up configuration such as CGI by notification
- **Alarm Output**: Set up Alarm Output (DO Control) configuration

6.1.1. E-mail Service Configuration

Email configuration is set up here for Alarm in case any event occurs.



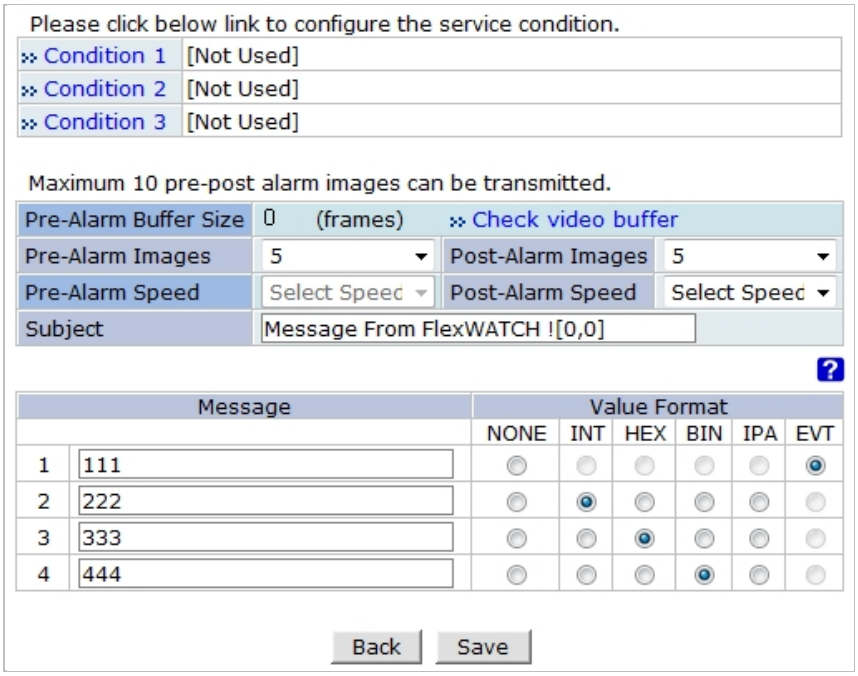


Item	Description
Camera 1~2	Select a channel to be configured for email notification
Service	Select **Enable** in order to use this service
SMTP server address	Enter SMTP server's address for sending email.
Authentication Login	Select **Enable** if SMTP server requires ID and password
User ID	Enter User ID to log in to SMTP server
Password	Enter Password to log in to SMTP server
Sender	Enter email address of the sender
1st Recipient	Enter the email address of the first recipient
2nd Recipient	Enter the email address of the second recipient
3rd Recipient	Enter the email address of the third recipient

Click **Save** button to apply the change. If you don't want to change, click **Back** button.

E-mail Service Setup for Each Channel

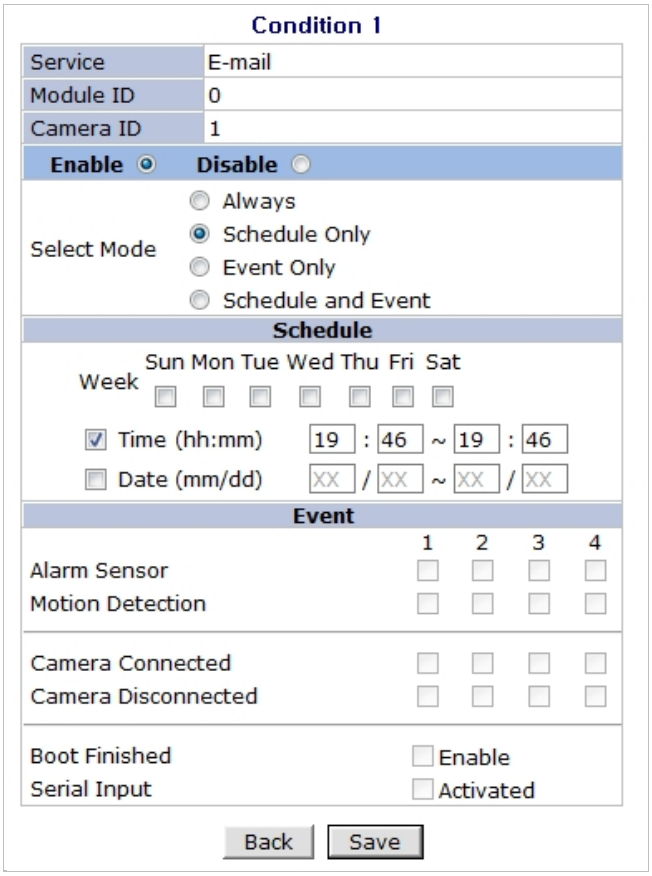
For each channel, the following items can be configured for email service: Condition, Post-Alarm Buffer Size, and Post-Alarm speed. The content of text message and display style of DI value can be configured as well.



Item	Description
Condition 1 ~ Condition 3	Select a condition for Email service to be activated.
Pre-Alarm Buffer Size	The Buffer size assigned for Pre-Alarm.
Check Video buffer	Click this link to go to Advanced Services for buffer setup.
Pre-Alarm Images	The number of image frames to store before Alarm
Post-Alarm Images	The number of image frames to store after Alarm
Pre-Alarm Speed	This field shows the speed of Pre-Alarm. Configuration can be done in Advances Services page.
Post-Alarm Speed	Select the speed of Post-Alarm. **Fastest** is the highest value.
Subject	Subject of the E-mail message to send.
1	Content of the first line in the email message.
2	Content of the second line in the email message.
3	Content of the third line in the email message.
4	Content of the fourth line in the email message
Value Format	Select the format for the Event or DI data to email. NONE: Don't Send, INT: Decimal, HEX: Hexadecimal, BIN: Binary, IPA: IP Address, EVT: Name of Event

After finishing setup, click **Save** button to apply. If you don't want to change, click **Back** button.

Condition, Schedule & Event Configuration

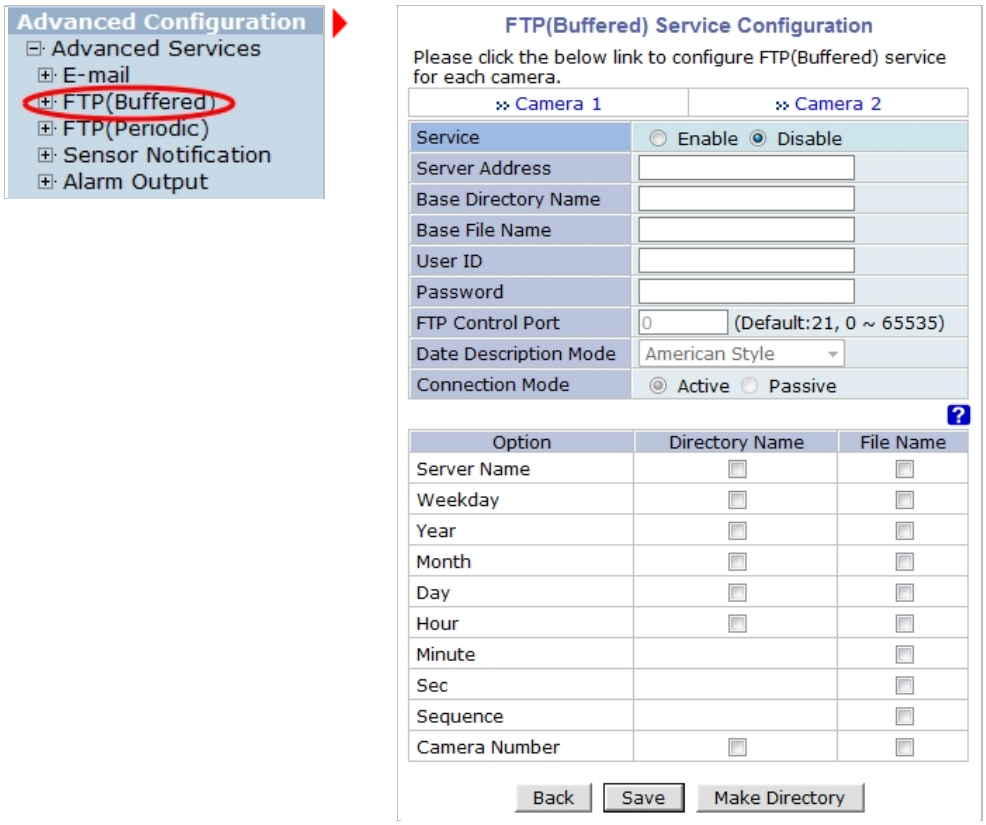


If you click on a **Condition** link, the **Advanced Service** windows is displayed as shown below. Alarm Service is activated only when the conditions in Advanced Services are met.

Item	Description
Service	This shows what service this condition is for.
Module ID	Module ID for current setup
Camera ID	Channel ID for current setup
Enable / Disable	Select **Enable** to use Condition, otherwise select **Disable**.
Always	This Condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time, and Date in Condition parameter. If none of weekdays is set, it is activated every day.
Event Only	It is activated only when any of the following events occurs. (Sensor, Motion Detection, Camera Connection, Server Booting)

To save the setting, click **Save** button. If you want to cancel it, click **Back**.

6.1.2. FTP (Buffered) Service Configuration

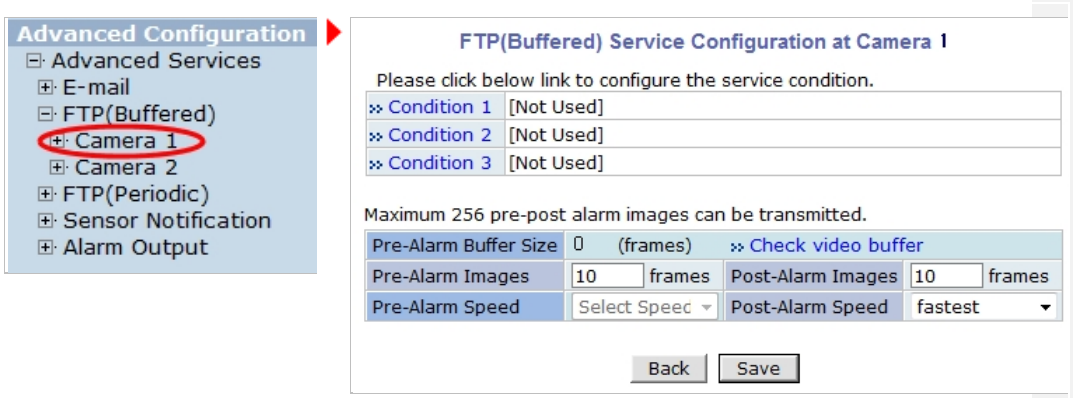


Item	Description
Camera 1 - Camera 2	Select which channel to set up for FTP (Buffered).
Service	Select **Enable** to use the FTP (Buffered) service. Otherwise select **Disable**.
Server Address	FTP Server Address.
Base Directory Name	The directory in FTP server where the data will be uploaded. (You should make the directory in the FTP server before using the service.)
Base File Name	The base file name of the data to be uploaded in FTP server.
User ID	Enter a User ID to log in to FTP server.
Password	Enter the Password for the user ID to log in to FTP server
FTP Control Port	Port number for FTP server (Normally 21 is used)
Date Description Mode	Select Date Display Style (e.g. 20090228)
Connection Mode	Select connection mode for FTP server

Server Name	If **Directory Name** is checked, new directory is created with server name. If **File Name** is checked, new file is created with server name.
Weekday	If **Directory Name** is checked, new directory name is created with weekday. If **File Name** is checked, new file name is created with weekday.
Month	If **Directory Name** is checked, new directory name is created with month. If **File Name** is checked, new file name is created with month.
Day	If **Directory Name** is checked, new directory name is created with day. If **File Name** is checked, new file name is created with day.
Hour	If **Directory Name** is checked, new directory name is created with hour. If **File Name** is checked, new file name is created with hour.
Minute	If checked, new file name is created with minute.
Sec	If checked, new file name is created with second.
Sequence	If checked, new files are created starting from 0, with increment of 1.
Camera Number	If **Directory Name** is checked, new directory is created with camera number. If **File Name** is checked, new file is created with camera number.

To create a directory with the options shown above, click **Make Directory** button. After finishing the configuration, click **Save** button to apply the change and continue to the next page. Clicking **Back** button will cancel the changes and go back to the previous page. (This service is available only in M-JPEG mode.)

FTP (Buffered) Service Configuration at Camera 1

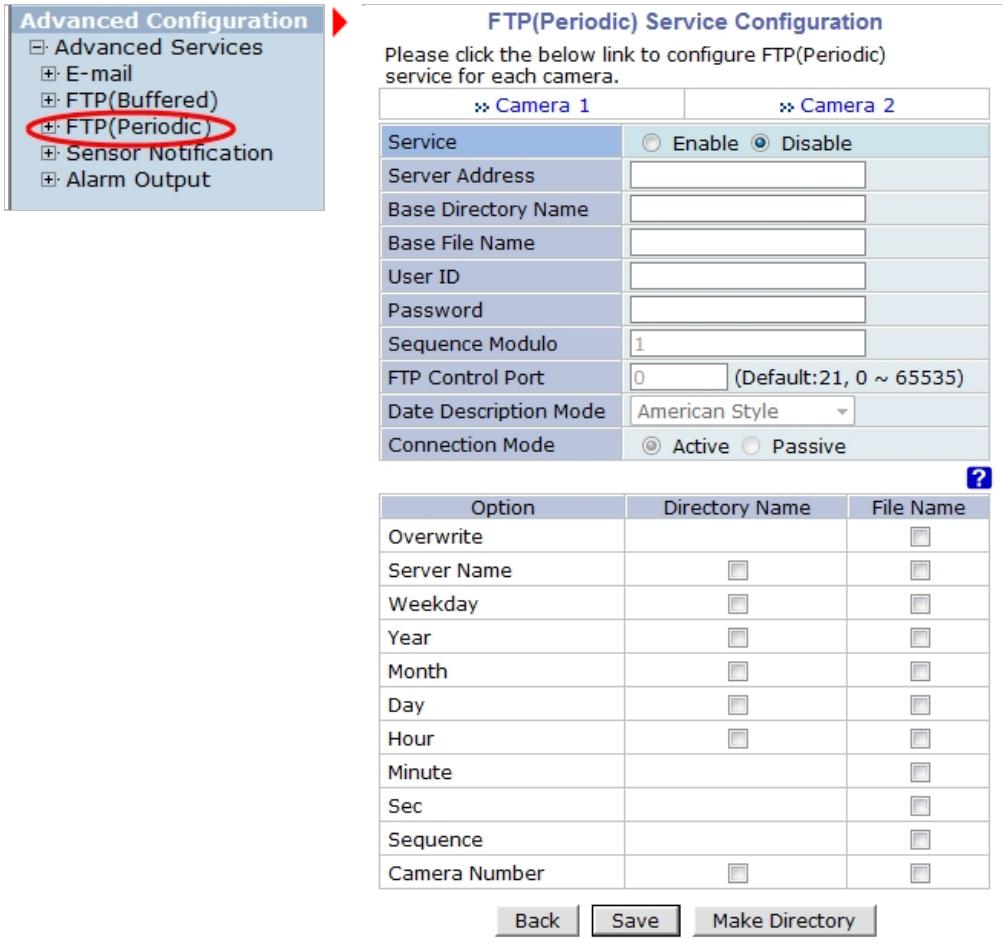


Item	Description
Condition 1 ~ Condition 3	Select a condition for FTP (Buffered) service to be activated. Up to 3 conditions can be set.
Pre-Alarm Buffer Size	The Buffer size assigned for Pre-Alarm.
Check Video buffer	Click this link to go to Advanced Services for video buffer setup.
Pre-Alarm Images	The number of image frames to store before Alarm.
Post-Alarm Images	The number of image frames to store after Alarm.

Pre-Alarm Speed	This field shows the speed of Pre-Alarm. Configuration can be done in Advances Services page.
Post-Alarm Speed	Select the speed of Post-Alarm. **Fastest** is the highest value.

After finishing setup, click **Save** button to apply. If you don't want to change, click **Back** button.

6.1.3. FTP (Periodic) Service Configuration

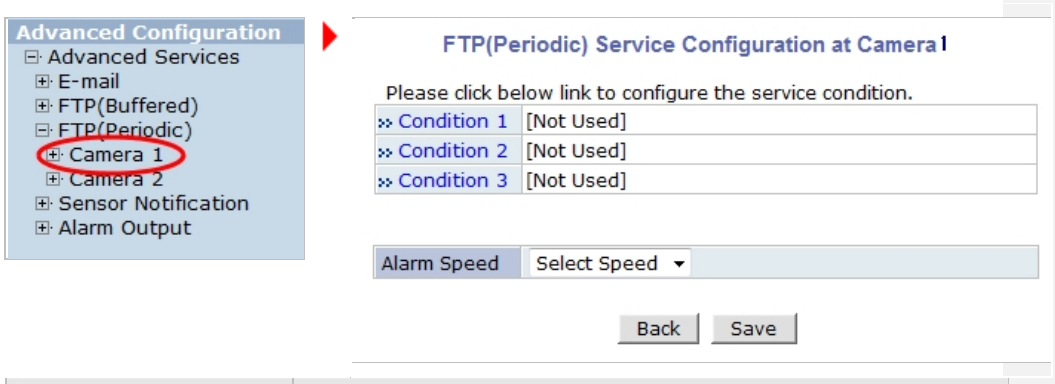


Item	Description
Camera 1 - Camera 2	Select which channel to set up for FTP (Periodic) service
Service	Select **Enable** to use the FTP (Periodic) service. Otherwise select **Disable**.
Server Address	FTP Server Address.
Base Directory Name	The directory in FTP server where the data will be uploaded. (You should make the directory in the FTP server before using the service.)
Base File Name	The base file name of the data to be uploaded in FTP server.
User ID	Enter a User ID to log in to FTP server.
Password	Enter the Password for the user ID to log in to FTP server
Sequence Modulo	Maximum number used in sequential file name

FTP Control Port	Port number for FTP server (Normally 21 is used)
Date Description Mode	Select Date Display Style (e.g. 20090228)
Connection Mode	Select connection mode for FTP server
Overwrite	If checked, new file overwrites the existing file with the same name.
Server Name	If **Directory Name** is checked, new directory is created with server name. If **File Name** is checked, new file is created with server name.
Weekday	If **Directory Name** is checked, new directory name is created with weekday. If **File Name** is checked, new file name is created with weekday.
Month	If **Directory Name** is checked, new directory name is created with month. If **File Name** is checked, new file name is created with month.
Day	If **Directory Name** is checked, new directory name is created with day. If **File Name** is checked, new file name is created with day.
Hour	If **Directory Name** is checked, new directory name is created with hour. If **File Name** is checked, new file name is created with hour.
Minute	If checked, new file name is created with minute.
Sec	If checked, new file name is created with second.
Sequence	If checked, new files are created starting from 0, with increment of 1.
Camera Number	If **Directory Name** is checked, new directory is created with camera number. If **File Name** is checked, new file is created with camera number.

To create a directory with the options shown above, click **Make Directory** button. After finishing the configuration, click **Save** button to apply the change and continue to the next page. Clicking **Back** button will cancel the changes and go back to the previous page. (This service is available only in M-JPEG mode.)

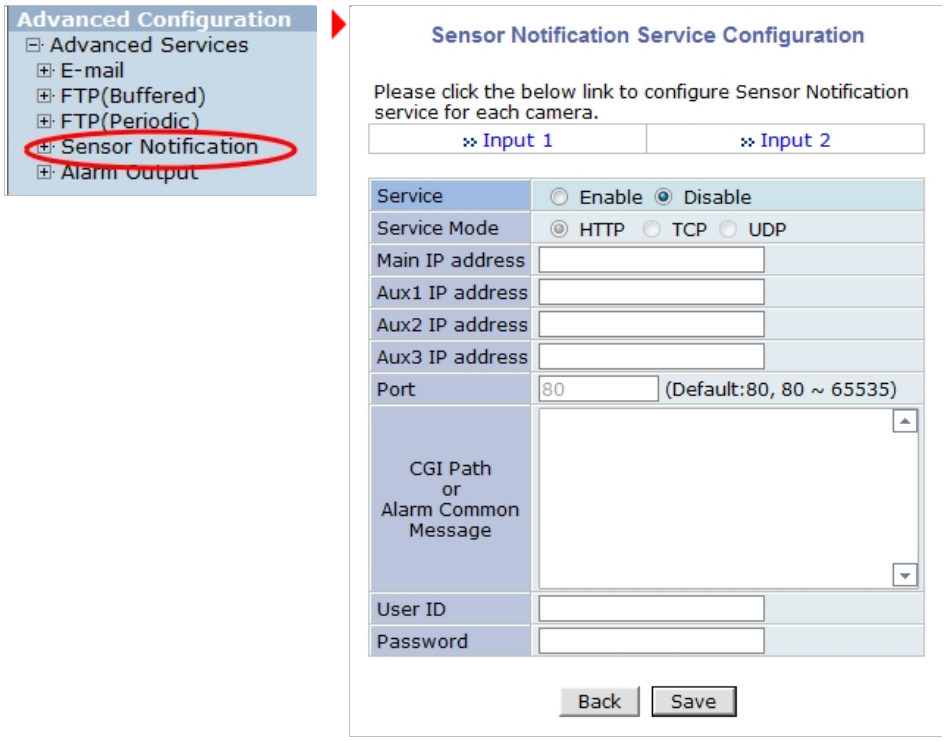
FTP (Periodic) Service Configuration for each channel



Item	Description
Condition 1 ~ Condition 3	Select a condition for FTP (Periodic) service to be activated. Up to 3 conditions can be set respectively.
Alarm Speed	Select the speed of images to send in FTP(Periodic) service

After finishing setup, click **Save** button to apply. If you don't want to change, click **Back** button.

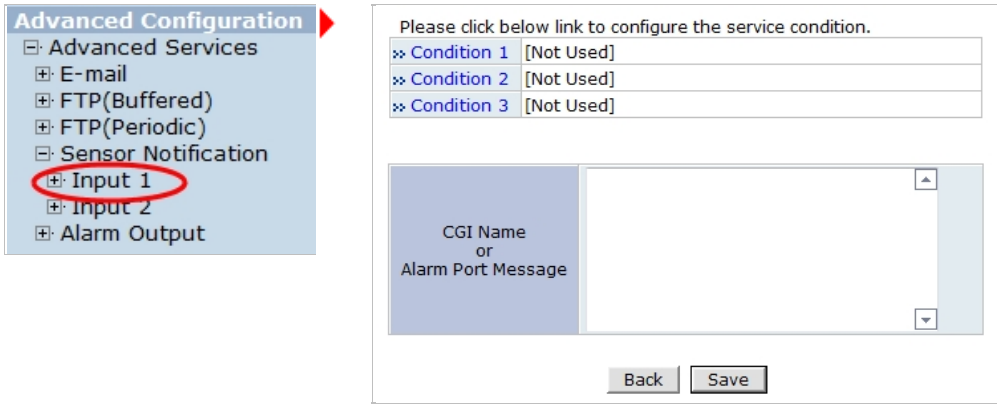
6.1.4. Sensor Notification Service Configuration



Item	Description
Input 1 - Input 2	Select which input to set up for Sensor Notification Service
Service	Select **Enable** to use Sensor Notification. Otherwise select **Disable**.
Service Mode	Select network mode for CGI. Select one among HTTP, TCP, or UDP.
Main IP address	Enter IP address to use in CGI or other functions
Aux1 ~ Aux 3 IP address	Enter 3 more addresses to use in CGI or other functions if needed.
Port	Enter port number for CGI or other functions. Default is 80.
CGI Path or Alarm Common Message	Enter CGI Path for CGI or other functions.
User ID	Enter User ID to log in.
Password	Enter Password for the User ID to log in.

After finishing the configuration, click **Save** button to apply the change and continue to the next page. Clicking **Back** button will cancel the changes and go back to the previous page.

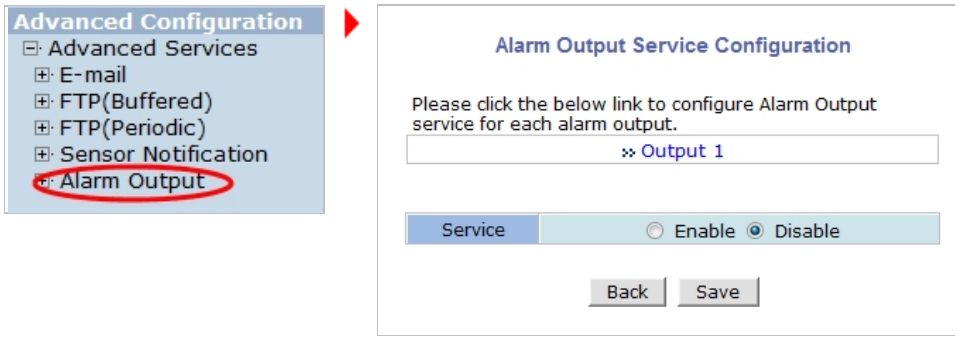
6.1.5. Sensor Notification Service Configuration for Each Input



Item	Description
CGI Name or Alarm Port Message	Enter the contents of CGI when it is used.

Click **Save** button to save the change. Clicking **Back** button will cancel the change and go back to previous page.

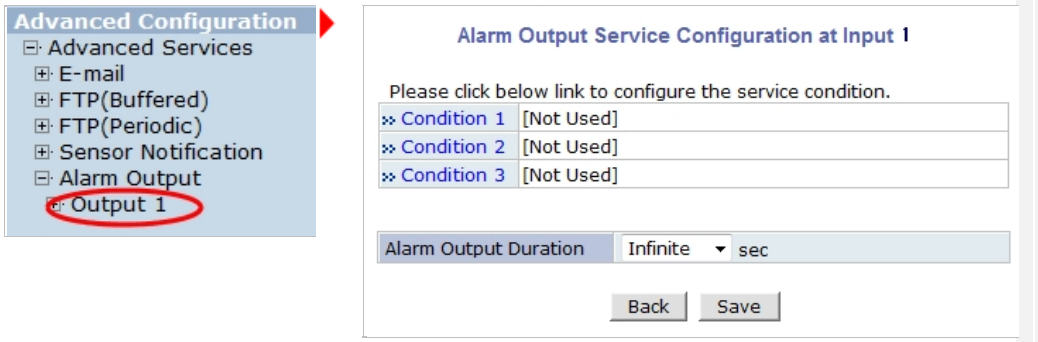
6.1.6. Alarm Output Service Configuration



Category	Contents
Output 1	output port for **Alarm Output Service**.
Service	Select **Enable** to use the service, otherwise select **Disable**.

After finishing the configuration, click **Save** button to apply the change and continue to the next page. Clicking **Back** button will cancel the changes and go back to the previous page.

6.1.7. Alarm Output Service Configuration for each Output

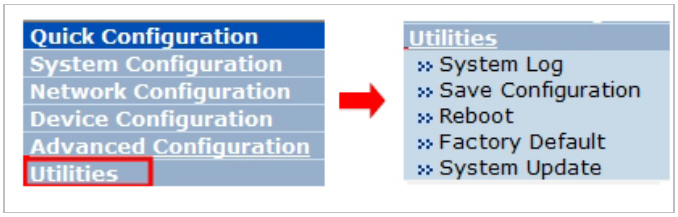


Item	Description
Condition 1 - Condition 3	Select a condition to configure Alarm Output Service. Up to 3 conditions can be set respectively.
Alarm Output Duration	Select how long the Alarm Output signal is maintained. Unit is in second.

.

7. Utilities

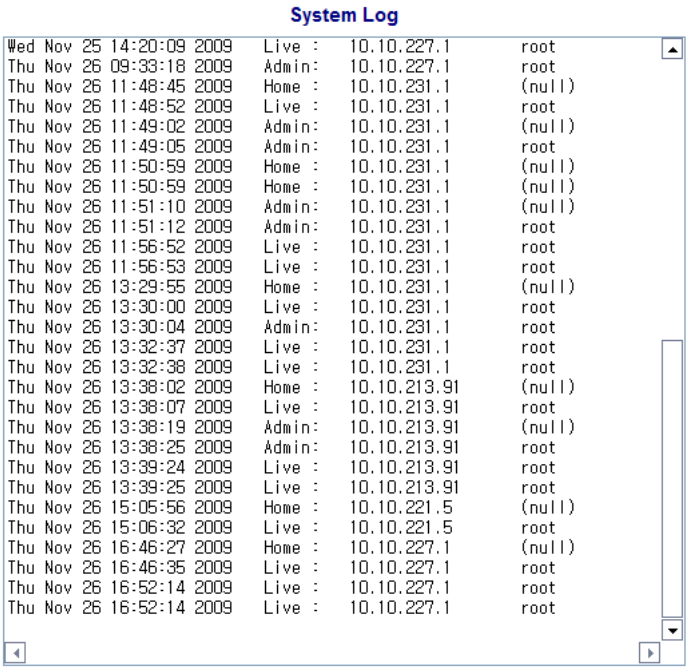
In **Utilities** part of the Admin menu, you can view the system log file, save the changed value during the configuration, reboot, restore the factory default condition, and update the system.



7.1. System Log

System log file provides you the information about when and who access the contents of IP-PVMZ Server such as HTTP file or CGI programs. In each line, log data consists of date, time, category, soIP-PVMZ e IP address, user ID logged in.

Day of Week	Month	Day	Hour:Minute:Second	Year	Category	IP Address	User ID



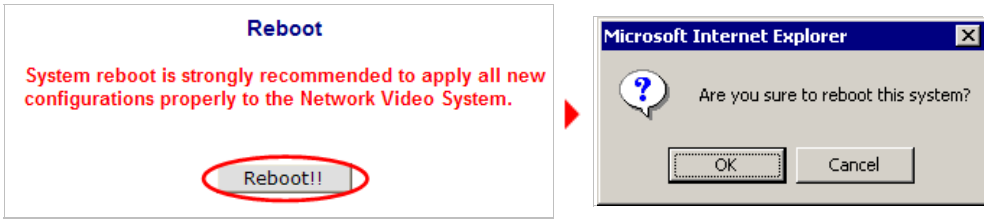
7.2. Save Configuration

After setting up IP-PVMZ Server, it is recommended to make sure by saving the changes in Flash Memory in the system. To save all the changes made during configuration, first click on **Save Configuration** on Utilities menu. The confirmation screen will be displayed as shown below. Click **Save Configuration** button to finalize the action, otherwise click **Back** button to cancel it.

7.3. Reboot

It is recommended to reboot the system after making changes and saving the configuration. To reboot, click **Reboot** on Utilities menu. A confirmation screen will be displayed as shown Click **Save Configuration** button, otherwise click **Back** button to cancel the rebooting.

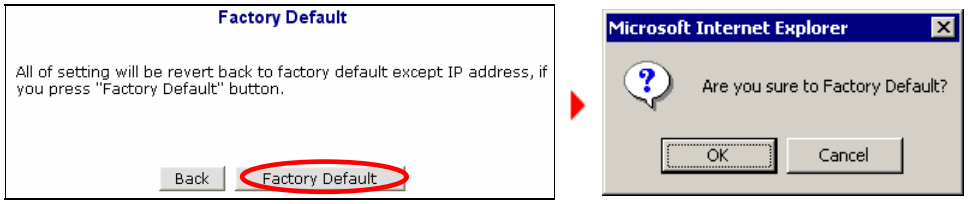
The second confirmation screen will be shown. This is only to confirm closing of web browser that IP-PVMZ Server is on. Click **OK** button to close the web browser and reboot right away. If you click Cancel, the web browser is still open, but you will not be able to access the IP-PVMZ Server until the rebooting is done.



7.4. Factory Default

Whenever it is required to restore the configuration of Camera setup to factory default condition, you can do it here. Network configuration is not affected by this action.

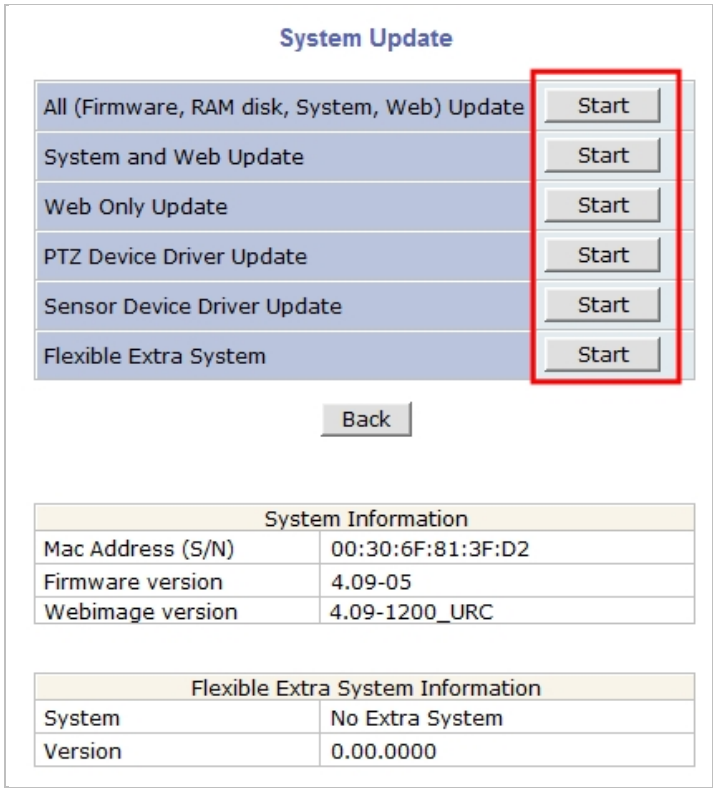
Click **Factory Default** on Utilities menu. A confirmation screen will be displayed as shown Click **Factory Default** button, otherwise click **Back** button to cancel it. The second confirmation screen will appear. Click **OK** button to restore the factory default condition right away. If you click **Cancel**, web browser will go back to the previous screen without any change made.



7.5. System Update

IP-PVMZ Server's system program and data are stored in Flash memory, and it consists of Kernel Image, RAM Disk Image, System Image, and Web Image. In order to update the system of the server, you should have proper image files ready in your PC.

Click **System Update** on Utilities menu, then the following window will be displayed. From the Start buttons displayed, choose the one that meets your need.

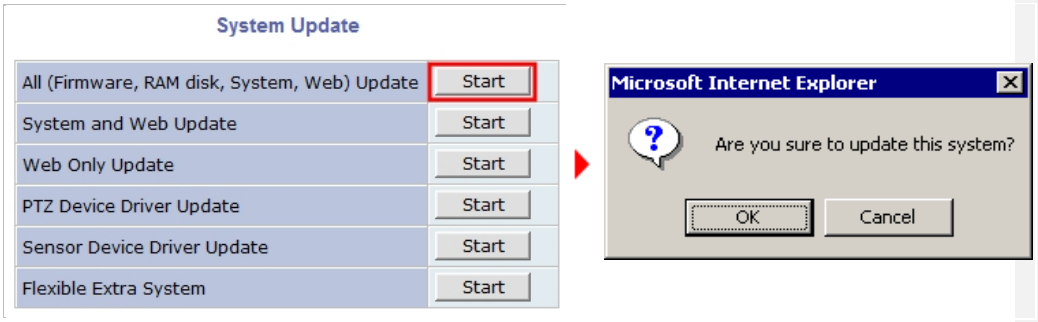


- **All (Firmware, RAM disk, System, Web) Update**: Update all four system images.
- **System and Web Update**: Only System and Web images are to be updated.
- **Web Only Update**: Only Web image is to be updated.

Up-to-date system files can be downloaded in Support page of IP-PVMZ's homepages at www.viewzusa.com. After the update is done, it is required to reboot the server.

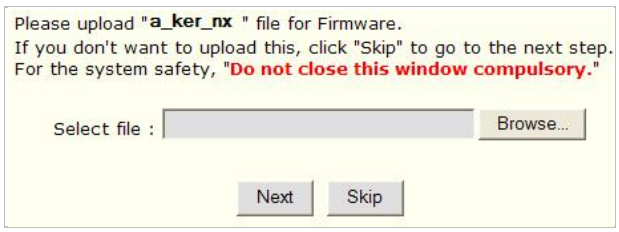
7.5.1. All (Kernel, RAM disk, System, Web) Update

Click the **Start** button next to **All (Firmware, RAM disk, System, Web) Update** item on the menu, and a confirmation window will appear. Click **OK** button to proceed the update, otherwise click **Cancel**.

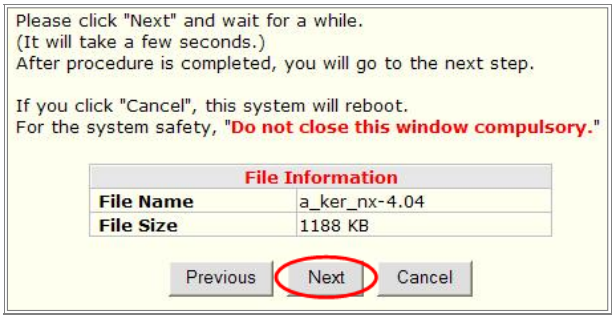


Note: If your web browser's pop-up blocker is enabled, your PC many not display the confirmation window above. In that case, the pop-up blocking feature of the web browser should be disabled for system update to be completed.

In the next window, enter the location of the Firmware Image file to update with. You can use the **Browse** button to navigate the directories in your PC to find the file. Once the image file is selected, click **Next** button to proceed. You can cancel the update by clicking **Skip** button.



Now you can check the file name and the size in the new window. If you want to go back to the previous stage, click **Previous** button. Click **Next** button to update the firmware right away and proceed to next stage. If you want to stop the update process, click **Cancel** button.

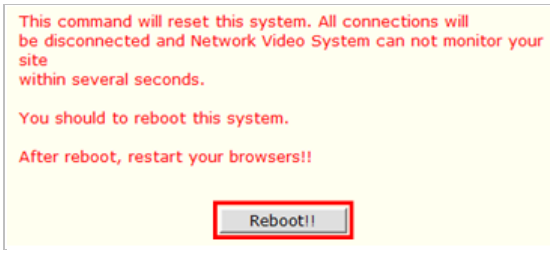


The next window is for locating the RAM Disk Update file.

Go through the same steps as in Firmware Update, and do the same in update process for **System and Web Update** files.

After all the update processes pare finished, the window for **Factory Default** is displayed. If there was no problem in the entire update processes and you want to continue, click **Next** button. If you're not sure about the system update, you can restore the Factory Default condition by clicking **Factory Default** button.

Now the final confirmation window will appear. Click **Reboot** button and the system will reboot.



7.5.2. System and Web Update

Click the **Start** button next to **System and Web Update** item on the menu, and a confirmation window will appear. Click **OK** button to proceed the update, otherwise click **Cancel**.

Go through the same steps as in **All Update** process (Kernel and RAM Disk updates are not made here). After update is done, click **Reboot** to start the system over.

7.5.3. Web Only Update

Click the **Start** button next to **Web Only Update** item on the menu, and a confirmation window will appear. Click **OK** button to proceed the update, otherwise click **Cancel**. The rest of the process is the same as in **All Update** part. After update is done, click **Reboot** to start the system over.

7.5.4. PTZ Device Driver Update

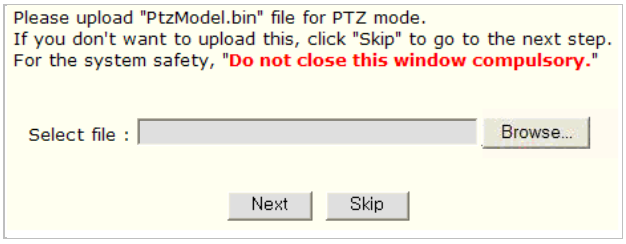
When adding a new PTZ model that doesn't have a proper driver found in IP-PVMZ Server, it is required to install a driver for the PTZ function. The name of the file used in update process is

PTZModel.bin.

Click the **Start** button next to **PTZ Device Driver Update** on the menu, and a confirmation window will appear. Click **OK** button to proceed the update, otherwise click **Cancel**. The rest of the update process is the same as in **All Update** part.

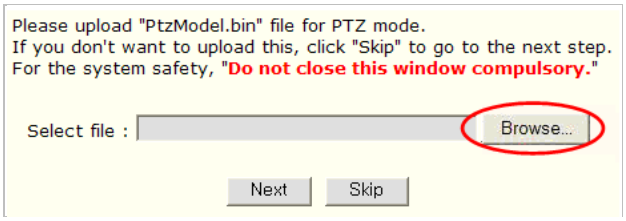
It displays the window that requests to enter the location of the PTZ Device Image file. The upper right corner of the window shows the progress of current update.

Note: If a new PTZModel.bin file needs to be made, contact IP-PVMZ .

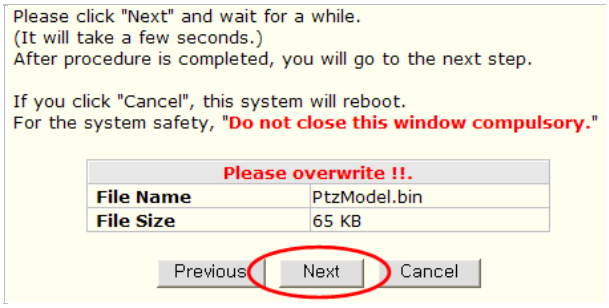


Using **Browse** button, locate the **PtzModel.bin** file from your PC.

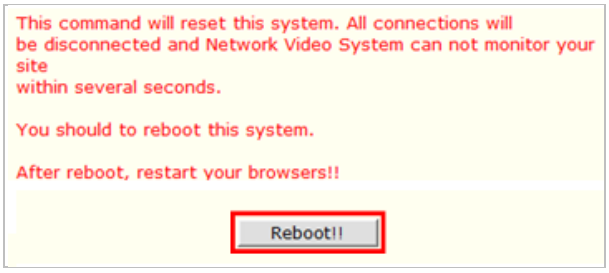
Note: If your web browser's pop-up blocker is enabled, the PC many not display the confirmation window above. In that case, the pop-up blocking feature of the web browser should be disabled for system update to be completed.



Click Next **button** to continue with the file. If **Skip** button is clicked, it will go to the next step without updating PTZ Device Image. If **Next** button was clicked in the previous step, you'll see the window displaying the file name and size.



Now the update process is finished and the window for rebooting will be displayed. Click **Reboot** button to start the server over.



7.5.5. Sensor Device Driver Update

When adding a new Sensor device that doesn't have a proper driver found in IP-PVMZ Server, it is required to install a driver for it. The name of the file used in update process is **SensorModel.bin**. Click the **Start** button next to **Sensor Device Driver Update** on the menu, and a confirmation window will be shown. Click **OK** button to proceed the update, otherwise click **Cancel**. The rest of the update process is the same as in **PTZ Device Driver Update** part.

> *Note: If a new SensorModel.bin file needs to be made, contact IP-PVMZ .*

7.5.6. Flexible Extra system

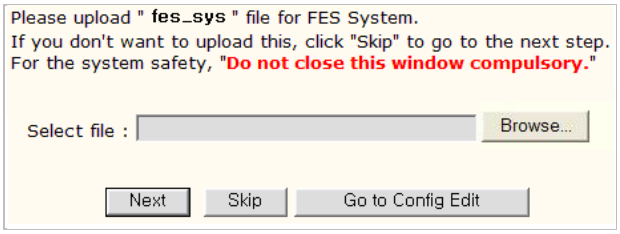
Flexible Extra system is an integrated system combining IP-PVMZ ® Server's video with external devices. Examples of the external devices can be entry control equipment, POS terminal, intelligent video analyzer, GPS terminal, dust density monitor, license plate recognition system, and so on.

The files required for updates can be different in each case, but usually consists of a system file and a configure file.

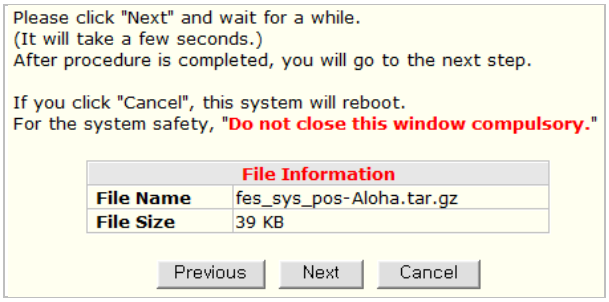
Click the **Start** button next to **Flexible Extra System** on the menu, and a confirmation window will appear. Click **OK** button to proceed the update, otherwise click **Cancel**.

In the next window, enter the location of the System Image file to update with. You can use the **Browse** button to navigate the directories in your PC to find the file.

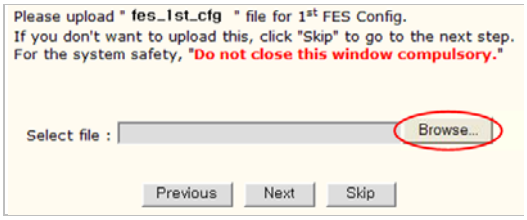
Once a System image file is selected, click **Next** button to proceed. If you click **Skip**, you will skip this step, and move to the next step. If you click **Go to Config Edit** button, it will go to the stage where you can edit the configuration file.



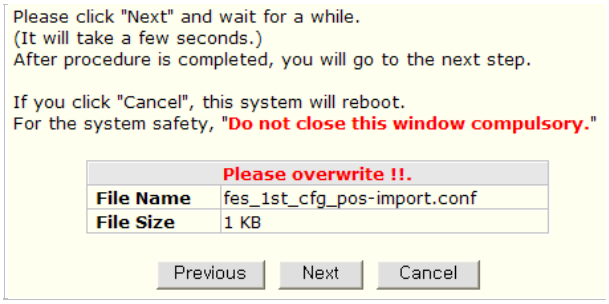
Now you can check the file name and the size in the new window. If you want to go back to the previous stage, click **Previous** button. Click **Next** button to update the System Image right away and proceed to next stage. If you want to stop the update process, click **Cancel** button.



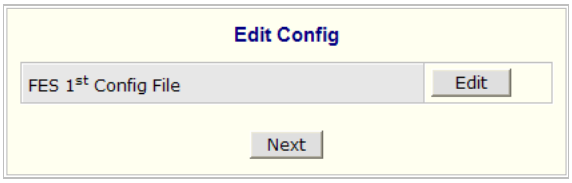
Now the window to locate the Config Image file is displayed. Selecting a file after clicking **Browse** button. Click **Next** button to move to the next stage. If **Previous** button is clicked, it will go back to the file selection step. If **Skip** button is clicked, it will go to the next step without updating the file.



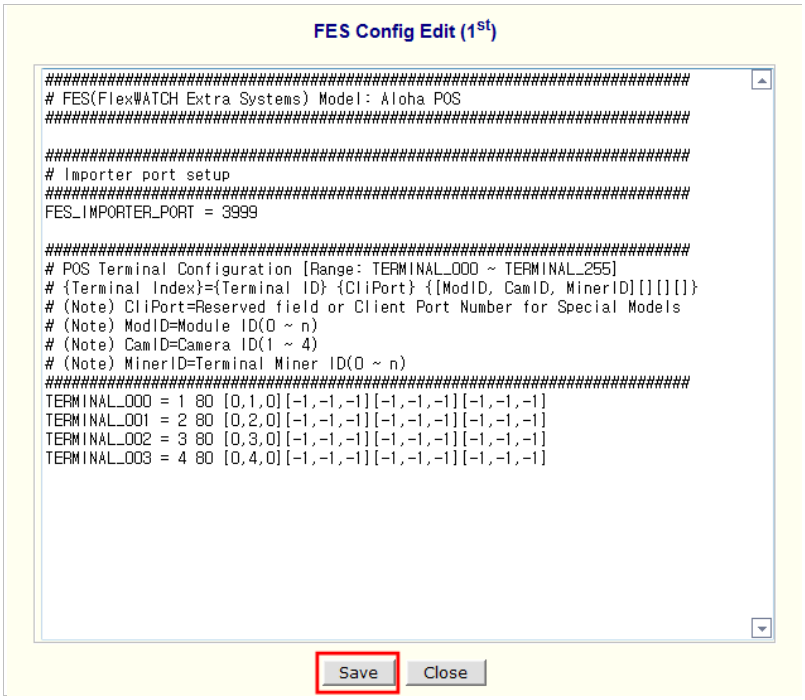
Check the file name and the size of Config Image file. If **Previous** button is clicked, it'll go back to start of file locating stage. If **Next** button is clicked, the update process will be done and go back to the next stage. If you want to stop the update, click **Cancel** button.



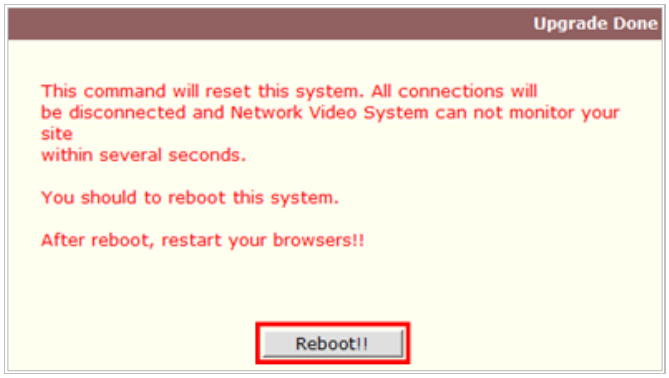
After finishing all the update process, it displays a window for editing the configuration file.



If you click **Edit** button, now you can edit the Config file after clicking Edit button which is found on the right of the file name.



Click **Save** button to save the Config file. Click **Close** button to close the editing window.
If you click **Next** button, a window for rebooting is displayed. Click **Reboot** button, and the system will start over.


Upgrade Done
This command will reset this system. All connections will be disconnected and Network Video System can not monitor your site within several seconds.
You should to reboot this system.
After reboot, restart your browsers!!
Reboot!!