

FlexWATCH User Manual

Part 3

(Admin Menu of FW Web page)

Version 3.0

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Seyeon Technology Co., Ltd

www.seyeon.co.kr

www.flexwatch.com

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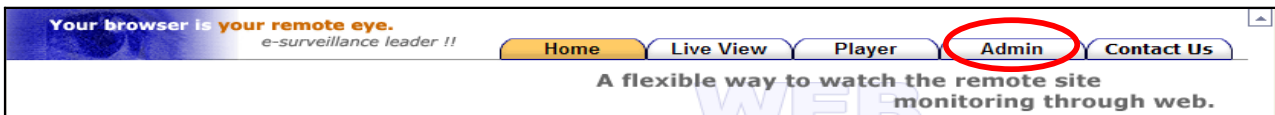
1. Admin Menu

Admin menu is for the administrator of FlexWATCH® Server. The administrator can manage the FlexWATCH® Server by this Admin menu. To access to Admin menu, you need to have Admin ID & Password. Factory default is “root” (Admin ID)/”root” (Admin Password). You can change the Admin password in Admin Menu.

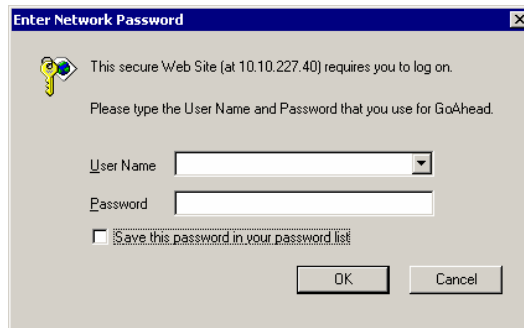
1.1. Access to Admin Menu

You can access to Admin Menu by following steps.

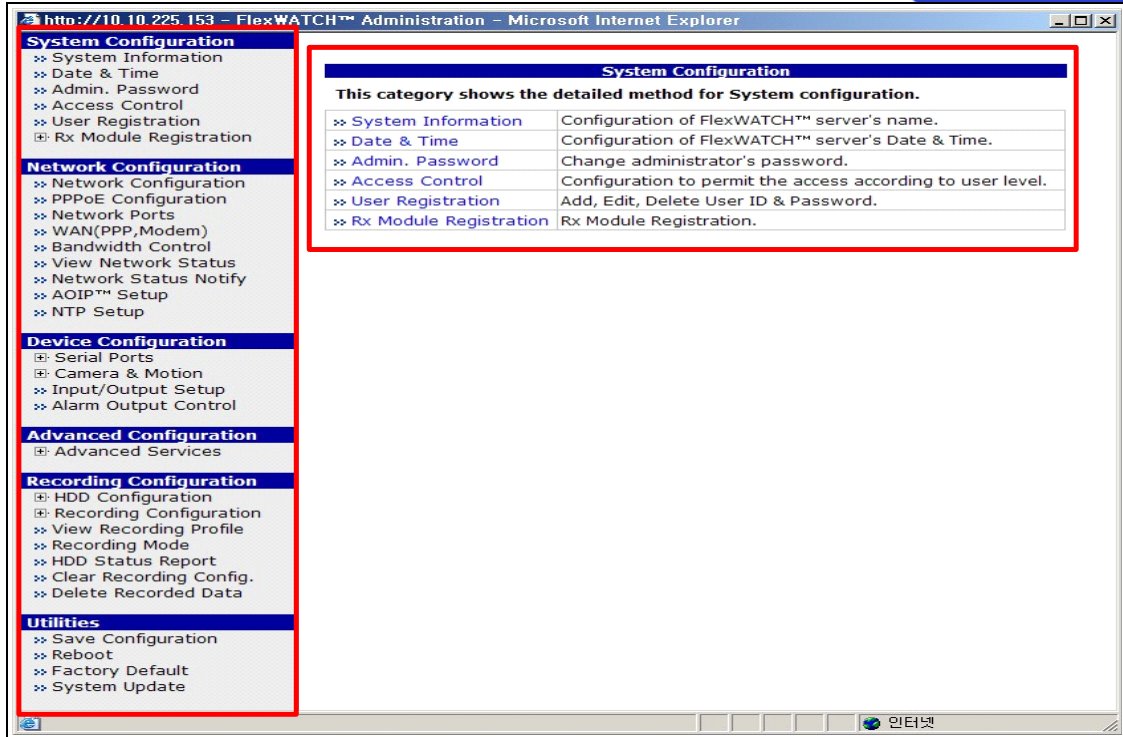
1. You can see the main page of FlexWATCH® Server by Web browser as below.



2. If you click Admin, you will be asked to enter ID & Password.



3. Please enter default ID:root & Password:root if you access to Admin page for the first time. If you changed the Password, please enter the changed password to log in. Please notice that Admin ID can't be changed.
 - A. Configuration Menu in Admin Menu. There are System, Network, Device, Advanced, Recording, Utilities group menus.
 - B. If you click group menu (System Configuration, Network Configuration, Device Configuration, Advanced Configuration, Recording Configuration, Utilities), you can see sub menu for each group menu.



1.2. Admin Menu Structure

Category	Main Menu	Level 1 Sub-Menu	Level 2 Sub-Menu
System Configuration	System Information	n/a	n/a
	Date & Time		
	Admin. Password		
	Access Permission		
	User Registration		
	Rx Module Registration		
Network Configuration	Network Configuration	n/a	n/a
	PPPoE Configuration		
	Network Ports		
	WAN(PPP, Modem)		
	Bandwidth Control		
	View Network Status		
	Network Status Notify		
	AOIP™ Setup		
	NTP Setup		
Device Configuration	Serial Ports	Serial Input Mode Serial Output Mode Transparent Mode PTZ Mode Voice Mode	n/a
	Camera & Motion	Camera 1 Camera 2 Camera 3 Camera 4	n/a
	Input/Output name	n/a	n/a
	Alarm Output Control	n/a	n/a
	Advanced Configuration	Advanced Services	Buffering Service

			Alarm Buffering
		Non-Buffering Service	FTP(Periodic) Sensor Notification Alarm Output
Recording Configuration	HDD Configuration	HDD Format HDD Information	
	Recording Configuration	Server Module 0 Recording Configuration	Camera 1 Camera 2 Camera 3 Camera 4
	View Recording Profile	n/a	n/a
	Recording Mode		
	HDD Status Report		
	Clear Recording Config		
Delete Recorded Data			
Utilities	Save Configuration	n/a	n/a
	Reboot		
	Factory Default		
	System Update		

2. System Configuration Menu

System configuration is to set up basic functions that help you properly run and manage the system. It is highly recommended to set up the configuration before any other configurations. This menu includes System Information, Date & Time, Administration account set up, Video relay management, and so on.

2.1. System Information

You can see current FlexWATCH® Server name, Serial number, Model name, and Firmware version.

System Information

Server name	FlexWATCH
Serial number	00:30:6F:81:01:EB
Model	FW-5450-S
Version	3.0.070325-mpeg

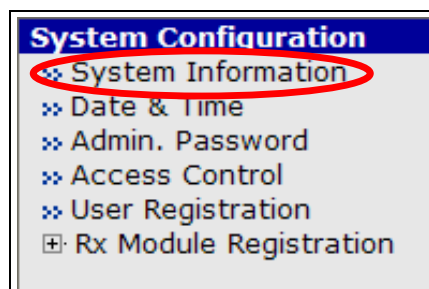
Notice : The server name can be 21-alpha-numeric or 10-unicode.
 (It means your own characters.)

Following menu will be provided. You can change Server Name while the other information can't be changed.

Server Name	FlexWATCH® Server Name. User definable and Identifier of the system when the system is accessed by third party program such as NDVR software.
Serial Number	FlexWATCH® Server Serial number(MAC Address).This information must be submitted for RMA or Warranty claim
Model	FlexWATCH® Server Model name. This information also needs to be submitted for technical support request.
Version	FlexWATCH® Server firmware version. This information also needs to be submitted for technical support request.

2.1.1. Server Name Configuration

1. Click "System Information" of System Configuration group.



2. Please Input proper Server Name as you wish.
 - A. Server name should be less than 21 alpha-numeric letters or 10 Unicode letters. You can't use Space, Tab, or special characters.
 - B. Since Serial Number, Model, Version are read only, you can't change them.

System Information

Server name	FlexWATCH
Serial number	00:30:6F:81:01:EB
Model	FW-5450-S
Version	3.0.070325-mpeg

Notice : The server name can be 21-alpha-numeric or 10-unicode. (It means your own characters.)

3. After changing the server name, please click Apply button.

2.2. Date & Time

Local Date & Time Configuration

Date (yyyy/mm/dd)	2007 / 4 / 2
Time (hh:mm:ss)	17 : 24 : 40
Time Zone	<input type="checkbox"/> Change Time Zone Asia/Seoul
NTP Server	ntp.ewha.net
NTP Status	Disable » NTP Setup

Notice : If you change the 'Time Zone' and click 'Apply' button, we strongly recommend to reboot this FlexWATCH™.

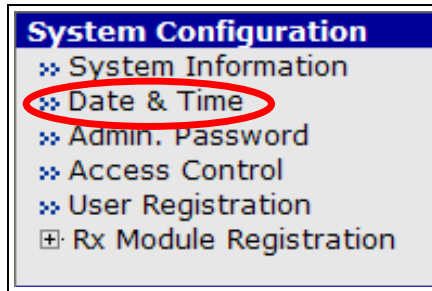
Date & Time Menu

Date (yyyy/mm/dd)	Current Date (year/month/day)
Time (hh:mm:ss)	Current Time (hour/minute/second)
Time Zone	Current Time Zone
NTP Server	Current NTP Server
NTP Status	If you click NTP Setup, you can check the current status of NTP Server. It will refresh the current server time with NTP server time once a day.

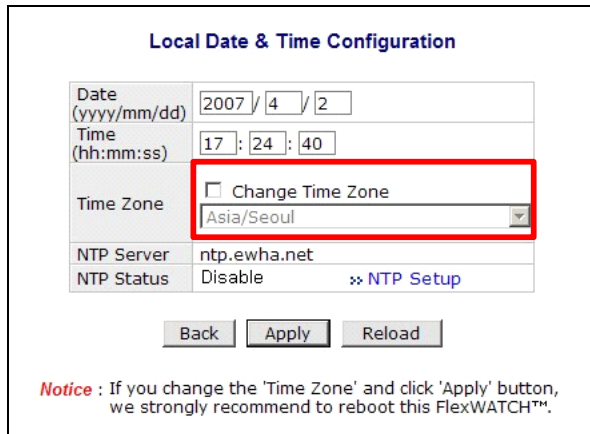
- ✓ NTP (Network Time Protocol) Server: provides you with exact date & time via Internet.

2.2.1. Date & Time Configuration

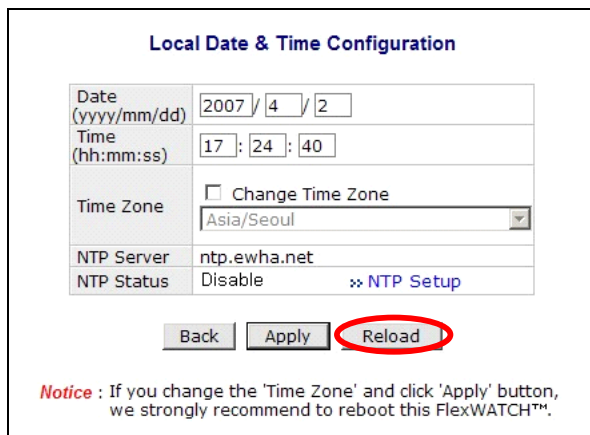
1. Click "Date & Time" of System Configuration group.



2. Please enter your desired Date and Time. In order to change Time Zone, please check on check box and click on list box. Then you can choose your desired Time Zone. (After the Time Zone change, please click Apply button and **Reboot** the FlexWATCH® server)



3. Without Time Zone change, if you click Apply button, then changed time will be applied to the system.
4. If you want to reload the time from FlexWATCH®, please click "Reload" button.



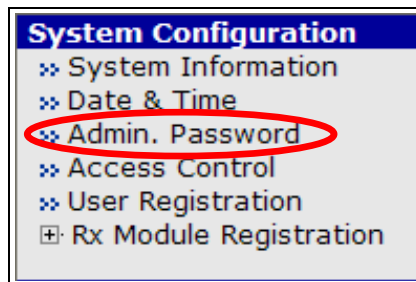
If you want to set current Date & Time by NTP Server, please click "NTP Setup". Please refer to 3.9

2.3. Admin Password

You can change the administrator's Password. Administrator ID is always "root".

2.3.1. Admin Password Configuration

1. Click "Admin. Password" of System Configuration group.



2. Please input current Password in Old Password.

A screenshot of the 'Administrator's Password Configuration' form. The form has four input fields: Administrator's ID (pre-filled with 'root'), Old Password, New Password, and Confirm Password. The 'Old Password' field is highlighted with a red box. Below the fields are 'Back' and 'Apply' buttons. A notice at the bottom states: 'Notice : The password must be alpha-numeric, within 4 ~ 23 characters.'

3. Input new Password in both New Password and Confirm Password. The Password shall consist of 4-23 alpha-numeric letters.

A screenshot of the 'Administrator's Password Configuration' form. The form has four input fields: Administrator's ID (pre-filled with 'root'), Old Password, New Password, and Confirm Password. Both the 'New Password' and 'Confirm Password' fields are highlighted with a red box. Below the fields are 'Back' and 'Apply' buttons. A notice at the bottom states: 'Notice : The password must be alpha-numeric, within 4 ~ 23 characters.'

4. After the password change, please click Apply button. At this time, the new password will take

effect and the current connection to FlexWATCH® Server’s Web Page will be disconnected. Therefore, you need to re-login with new Password.

2.4. Access permission

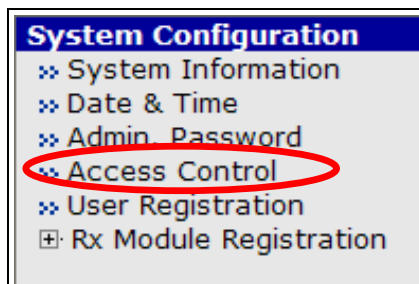
You can set up user accounts for the access to FlexWATCH® Server.

Access Permission Menu

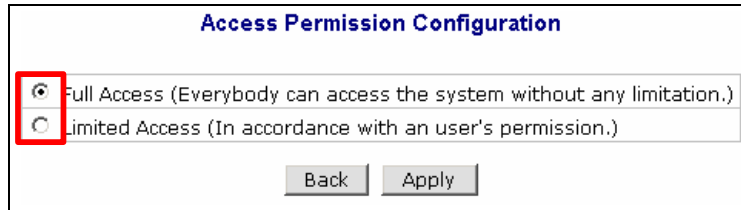
Full Access	To allow system access by anyone who knows the IP address. PTZ, Audio and Relay output device can be controlled by anyone. Thus, if security for video is important, it is highly recommended to user limited access mode below
Limited Access	To limit server access to the authorized user only. Through this mode, you can create multi level access accounts for each camera, not system level, with different control authority. Once Limited Access option is selected, User registration should be followed to effectively use Limited Access function.
Maximum Frame Rate	Available display rate for each channel of the FlexWATCH server. You can choose among 30,15,10,5,2 and 1. Frame rate for the display will be based on the chosen number. This function is only for M-JPEG mode.

2.4.1. How to set Access permission

1. Click “Access Control” of System Configuration group.



2. Please select either Full Access or Limited Access.



3. Click Apply button to have the current setting to take effect.

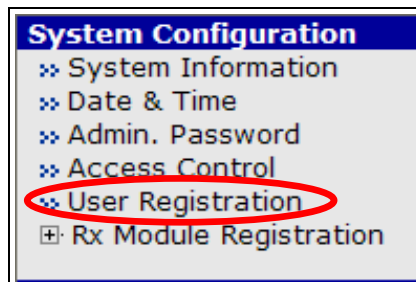
2.5. User Registration

You can register, edit and delete user accounts for FlexWATCH® Server. Registered users are valid only when Access Permission is selected as Limited Access.

2.5.1. Add

You can add a new user by entering user ID, Password, User Name and System Resource Access Permission.

1. Click "User Registration" of System Configuration group.



2. Select Add.



3. Input User ID in User ID field. User ID shall be less than 23 alpha-numeric letters.

4. Please Input User password in both Password and Confirm fields. Password shall also be less than 23 alpha-numeric letters.

User ID	<input type="text"/>
Password	<input type="password"/>
Confirm Password	<input type="password"/>
Full Name	<input type="text"/>

5. Enter User's name in Name field. You can enter less than 31 alpha-numeric letters or less than 15 other special letters.

User ID	<input type="text"/>
Password	<input type="password"/>
Confirm Password	<input type="password"/>
Full Name	<input type="text"/>

6. Please choose the level of authority for the chosen user.

System Resource Access Permission	
<input checked="" type="radio"/>	Full Access
<input type="radio"/>	No Access
<input type="radio"/>	Selective Access

Full Access	If full access is selected, anybody can access the server and control the video except for Admin menu.																																																																																				
No Access	This is to temporally restrict camera access by specific user without deleting user account to temporally block access to the camera. The user can access to Live View but can't see video.																																																																																				
Selective Access	This is to give a user some limitation on cameras. Enable boxes will be activated.																																																																																				
	<table border="1"> <thead> <tr> <th colspan="7">System Resource Access Permission</th> </tr> <tr> <td><input checked="" type="radio"/></td> <td colspan="6">Full Access</td> </tr> <tr> <td><input type="radio"/></td> <td colspan="6">No Access</td> </tr> <tr> <td><input type="radio"/></td> <td colspan="6">Selective Access</td> </tr> <tr> <th>Enable</th> <th>VS Module ID</th> <th>Camera No.</th> <th>Alarm Control</th> <th>PTZ Control</th> <th colspan="2">Voice Control</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td>0</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td colspan="2"><input type="checkbox"/></td> </tr> </tbody> </table>	System Resource Access Permission							<input checked="" type="radio"/>	Full Access						<input type="radio"/>	No Access						<input type="radio"/>	Selective Access						Enable	VS Module ID	Camera No.	Alarm Control	PTZ Control	Voice Control		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Enable	You can select VS Module, Camera No, Alarm Control, PTZ Control, and Voice Control. By selecting each function, you can give a user some limitation of accessing FlexWATCH® Server.																																																																																				

		System Resource Access Permission					
		<input type="radio"/> Full Access <input type="radio"/> No Access <input checked="" type="radio"/> Selective Access					
Enable	VS Module ID	Camera No.	Alarm Control	PTZ Control	Voice Control		
<input checked="" type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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<input type="checkbox"/>	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
VS Module ID	FlexWATCH® server ID which is recognized by the server. Default # is 0. Please disregard other VS Module ID appeared in the drop down menu. Other module numbers is for future use, which is not currently workable. However, VS Module 1 ~15 can be workable for NVR such as FW5xxx series since VS Module is for Network devices(Network Storage Server or NVS) connecting to NVR						
Camera No	You can select Camera No for each VS Module (1~4 ch)						
Alarm Control	To allow a user to control Alarm function						
PTZ Control	To allow a user to control PTZ function (PTZ : Pan Tilt Zoom control)						
Voice Control	To allow a user to control Audio function						

7. Please click Apply button.

2.5.2. Edit

You can edit the existing user's Password, name, level of authority. However, you can't change user ID. Editing procedure is similar to that of Add function.

1. Select Edit



2. Select User ID from the User ID list box.



3. Please edit user password, level of authority and click Apply button.

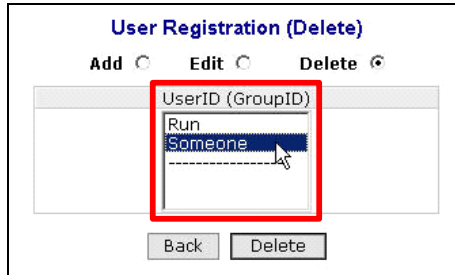
2.5.3. Delete

You can delete the existing user's account.

1. Select Delete.



2. Select User ID from the User ID box.

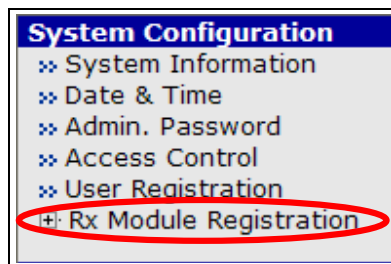


3. Click Delete button. Then the selected user account will be deleted

2.6. Rx Module Registration [FW-5450 Only]

You can register remote NVS (Network Video Server) or NCS (Network Camera Server) into NVR (Network Video Recorder; FW-5450, etc.) as remote channels by Rx Module Registration.

1. Click "Rx Module Registration" of System Configuration group.



2. Please select one of Server Modules in the list and register desired FlexWATCH® Server. You can register up to 12 channels. For example, you can register up to 12 one channel servers while you can register up to 3 four channel servers.

Rx Module Registration				
This is to register Network camera or video server into NVR server to establish communication between the servers. Up to 16 Video Server modules can be registered.				
VS Module ID	Name	Connection Type	IP Address	MAC Address
Server Module 0	Local Device 0	Local Device	0.0.0.0	
Server Module 1		Not Used	-	
Server Module 2		Not Used	-	
Server Module 3		Not Used	-	
Server Module 4		Not Used	-	
Server Module 5		Not Used	-	
Server Module 6		Not Used	-	
Server Module 7		Not Used	-	
Server Module 8		Not Used	-	
Server Module 9		Not Used	-	
Server Module 10		Not Used	-	
Server Module 11		Not Used	-	
Server Module 12		Not Used	-	
Server Module 13		Not Used	-	
Server Module 14		Not Used	-	
Server Module 15		Not Used	-	

Back Apply

3. After addition of Server Module, please click Apply button.

2.6.1. Addition of Rx Server Module

1. Click any of Server Modules.
2. Please select Enable. Then all the other fields will be activated. If you don't want to use this VS Module, please select Disable.

Rx Module Registration

VS Module ID 1 ?

Enable Disable

Connection Type

Active (Static IP)

Using AOIP™ Server

Local (Built-in)

Passive

Name

Model

IP Address

MAC Address

NVCP Port (Destination Tx Port) (Default:50200, ~ upto 65535)

NVCP Password

Confirm Password

Back Save

3. Please choose proper Connection Type.

Active (Static IP)	In case of the server has static IP. Please enter IP address of the server.
Using AOIP Server	In case of the server has dynamic IP and the server is registered in AOIP server, which is provided for dynamic IP support. Please enter MAC address of the server to be registered.
Local(Built-in)	Local 4 channels of FW-5450. User can't change this.
Passive	When the server has dynamic IP and the FW5450 has static IP, please enter MAC address of the server to be registered.

- Please input a server name in Name field. And select the right type of series of model. No specific model can be selected. Note that some series of model is not available right now such as 4200, 4600, 5800, etc. IP Address field will be activated when the Connection Type is Active (Static IP) whereas MAC Address field will be activated when the Connection Type is either Using AOIP Server or Passive.

Following is information about the series of FlexWATCH Models.

FW-1100 Series = FW-1100, FW-1110L, FW-1110LW, FW-1110, FW-1110D, FW-1110W, FW-1120, FW-1130, FW-1130W, FW-1131, FW-1132, FW-1150, FW-1160, FW-1160E, FW-1160S, FW-1160SE, FW-1161S, FW-1161SE.

FW-1200 Series = FW-1200

FW-1400 Series = FW-100A

FW-3100 Series = FW-200A, FW-3110, FW-3150

FW-3200 Series = FW-3210

FW-3400 Series = FW-3400, FW-3440, FW-3450

FW-3600 Series = FW-500A

FW-5000 Series = FW-5000, FW-5050

FW-5400 Series = FW-5440, FW-5450

Rx Module Registration

VS Module ID 1 Enable Disable

Connection Type Active (Static IP)
 Using AOIP™ Server
 Local (Built-in)
 Passive

Name

Model FW-3400 Series

IP Address

MAC Address - - - - - VS Module ID 0

NVCP Port (Destination Tx Port) 50200 (Default:50200, ~ upto 65535)

NVCP Password

Confirm Password

Back Save

5. NVCP Port (Destination Tx Port) should be the same as the service port number of remote NVS or NCS you are about to register here. Default value is 50200 and the value can be up to 65535. NVCP port field will only be activated when Connection Type is Active (Static IP).

Rx Module Registration

VS Module ID 1 Enable Disable

Connection Type Active (Static IP)
 Using AOIP™ Server
 Local (Built-in)
 Passive

Name

Model FW-3400 Series

IP Address

MAC Address - - - - - VS Module ID 0

NVCP Port (Destination Tx Port) 50200 (Default:50200, ~ upto 65535)

NVCP Password

Confirm Password

Back Save

6. VS Module ID is the number of the built-in module of NVS or NCS, which provides remote channels. VS Module ID is always 0(default value) for any 1, 2, or 4 channel server. If you select any other number, it won't work properly.
7. NVCP Password should be the same as that of remote NVS or NCS you are about to register here. The default NVCP password of FlexWATCH server is "nvcp".

Rx Module Registration

VS Module ID 1	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type	<input checked="" type="radio"/> Active (Static IP) <input type="radio"/> Using AOIP™ Server <input type="radio"/> Local (Built-in) <input type="radio"/> Passive
Name	<input type="text"/>
Model	FW-3400 Series
IP Address	<input type="text"/>
MAC Address	- - - - - VS Module ID 0
NVCP Port (Destination Tx Port)	50200 (Default:50200, ~ upto 65535)
NVCP Password	••••
Confirm Password	••••

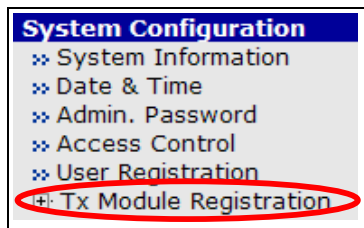
Back Save

8. Once configuration is done, click “Save” button. If you don’t want to register it, please click “Back” button.
9. After Rx Module registration by “Save” button, please click “Apply” button to take effect.

2.7. Tx Module Registration [FW-3450 & FW-1130 & FW-3150 Only]

Tx Module Registration is to provide NVR (Network Video Recorder; FW-5450, etc.) with remote channels from NVS (Network Video Server) or NC (Network Camera).

1. Please Click Tx Module Registration of System Configuration group.



2. The total number of Tx Module is 16. Thus **Up to 16 different NDVR servers** can simultaneously work with FlexWATCH server. Default setting for Tx Module is “passive”, so if NVR’s Rx Module is “active” the NVS can connect to NVR right away.
3. You can select one Tx Module and change it to “active”.

Tx Module Registration
NVCP Password Configuration

New Password

Confirm Password

It is security code to authenticate communication between the video server and NVR server. The default password is "nvcp". The new password automatically replaces old one. If the NVCP password is changed, that nvcp password should be assigned to NVR server. Otherwise, no communication can be set up between the devices.

Please click the below link to configure Tx Module.

Tx Module	Tx module Name	Connection Type	IP Address	MAC Address
Tx Module 0		Passive Mode		00-30-6F-00-00-00
Tx Module 1		Passive Mode		00-30-6F-00-00-00
Tx Module 2		Passive Mode		00-30-6F-00-00-00
Tx Module 3		Passive Mode		00-30-6F-00-00-00
Tx Module 4		Passive Mode		00-30-6F-00-00-00
Tx Module 5		Passive Mode		00-30-6F-00-00-00
Tx Module 6		Passive Mode		00-30-6F-00-00-00
Tx Module 7		Passive Mode		00-30-6F-00-00-00
Tx Module 8		Passive Mode		00-30-6F-00-00-00
Tx Module 9		Passive Mode		00-30-6F-00-00-00
Tx Module 10		Passive Mode		00-30-6F-00-00-00
Tx Module 11		Passive Mode		00-30-6F-00-00-00
Tx Module 12		Passive Mode		00-30-6F-00-00-00
Tx Module 13		Passive Mode		00-30-6F-00-00-00
Tx Module 14		Passive Mode		00-30-6F-00-00-00
Tx Module 15		Passive Mode		00-30-6F-00-00-00

Tx module registration is to set up the server to transmit video streams to external device such as FW-5440 or 5000 NVR server over the TCP/IP network. Video can be transmitted up to 16 different external devices simultaneously.

4. After Tx Module registration, please click “Apply” button so that the new configuration can take effect.

2.7.1. Tx Module Change

1. Please click one of Tx Module on the list.

Tx Module

[Tx Module 0](#)

[Tx Module 1](#)

[Tx Module 2](#)

[Tx Module 3](#)

2. Select Enable in Tx Module field. If you don’t want to use this module, please select Disable. The factory default is Enable.

Tx Module Registration ?

Tx Module 0	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type	<input checked="" type="radio"/> Passive <input type="radio"/> Active(Static IP)
IP Address	
NVCP Port (Destination Rx Port)	(Default:50100, ~ upto 65535)
VS Module ID	<input type="text"/>

Notice

- "Destination Rx Port" is TCP port number of Rx Module on remote device which is counterpart of this Tx Module.
- There is no any relationship between Tx Module and VS module numbers.

3. Select the Connection Type with NVR.

Tx Module Registration ?

Tx Module 0	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type	<input checked="" type="radio"/> Passive <input type="radio"/> Active(Static IP)
IP Address	
NVCP Port (Destination Rx Port)	(Default:50100, ~ upto 65535)
VS Module ID	<input type="text"/>

Notice

- "Destination Rx Port" is TCP port number of Rx Module on remote device which is counterpart of this Tx Module.
- There is no any relationship between Tx Module and VS module numbers.

Passive	Factory Default value. You can select this when NVR with dynamic IP and this NVS with static IP. In this case, IP address and NVCP Port fields won't be activated.
Active (Static IP)	You can select this when NVR with static IP and this NVS with dynamic IP. Please enter IP address and NVCP port.

4. IP Address field will be activated when the Connection Type is Active (Static IP). You can enter IP address of NVR.

Tx Module Registration

Tx Module 0	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type	<input type="radio"/> Passive <input checked="" type="radio"/> Active(Static IP)
IP Address	<input type="text"/>
NVCP Port (Destination Rx Port)	50100 (Default:50100, ~ upto 65535)
VS Module ID	0

Back Save

Notice

- "Destination Rx Port" is TCP port number of Rx Module on remote device which is counterpart of this Tx Module.
- There is no any relationship between Tx Module and VS module numbers.

5. NVCP Port field will be activated only when Connection Type is "Active (Static IP)". NVCP Port (Destination Rx Port) should be the same as the service port number of Rx Module of NVR. Default value is 50100 and the value can be up to 65535. NVCP port field will only be activated when Connection Type is Active (Static IP).

Tx Module Registration

Tx Module 0	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type	<input type="radio"/> Passive <input checked="" type="radio"/> Active(Static IP)
IP Address	<input type="text"/>
NVCP Port (Destination Rx Port)	50100 (Default:50100, ~ upto 65535)
VS Module ID	0

Back Save

Notice

- "Destination Rx Port" is TCP port number of Rx Module on remote device which is counterpart of this Tx Module.
- There is no any relationship between Tx Module and VS module numbers.

6. VS Module ID is the number of the built-in module of NVS or NCS, which provides remote channels. VS Module ID is always 0(default value) for any 1, 2, or 4 channel server. If you select any other number, it won't work properly.
7. If you want change NVCP Password instead of default password "nvcp", please enter new password in New Password and Confirm Password fields.

NVCP Password Configuration

New Password	<input type="text"/>
Confirm Password	<input type="text"/>

Back Save

8. After the configuration is done, please click Save, otherwise please click Back button.
9. After Tx Module change, please click "Apply" button so that the new configuration can take effect.

3. Network Configuration

You can do general network configuration for FlexWATCH® Server and can check current setting values. Network configuration mode provides interface for the server to be connected to broadband network or PSTN line. In addition to basic network, application port such as HTTP, NVCP, Voice port configuration and IP filtering options are provided.

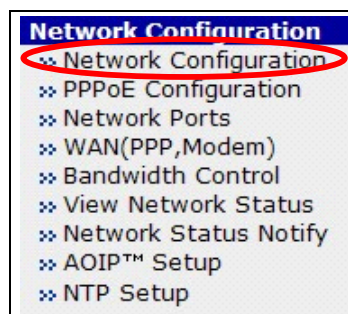
3.1. Network Configuration

You can configure the network settings in accordance with your network services such as Static IP, DHCP Client, PPPoE, etc. LAN port must be used for network configuration. You can consult ISP for more information.

1. Static IP: you can use this configuration if you have a static IP address for a FlexWATCH server.
2. DHCP Client: you can use this configuration if you use DHCP service. For example, most ISPs' services (Cable modem or ADSL, VDSL) are DHCP type, under which you are assigned IP address automatically.
3. PPPoE: Some DSL or Cable Modem based ISP provides PPPoE based internet connection service. If FlexWATCH server must directly be connected to the external DSL or Cable modem, PPPoE option must be enabled. You need to enter ID & Password to connect to the Internet.

3.1.1. Static IP Configuration

1. Please click "Network Configuration" of Network Configuration group.



2. If you select Static IP, then you will be able to enter IP Address, Netmask, Gateway, DNS1, and DNS2.

Network Configuration : Static IP

Static IP
 DHCP Client

IP Address	10.10.225.153
NetMask	255.255.0.0
GateWay	10.10.1.1
DNS 1	168.126.63.1
DNS 2	168.126.63.2

3. Please enter proper values into IP address, Netmask, Gateway, DNS1 and DNS2 fields.
4. Click Apply button to save new setting values. If you click Reset, the values will be restored with old values. If you don't apply new settings, please click Back to go back to previous page.

3.1.2. DHCP Client Configuration

DHCP Client is selected as factory default.

1. Select DHCP Client under dynamic IP environment.

Network Configuration : DHCP Client

Static IP
 DHCP Client

Notice : Please make sure to set up "Network Status Notify" option to get IP address through e-mail when DHCP option is selected.

2. Click Apply button to save the current setting. Please click Back to go back to previous page.

3.2. PPPoE Configuration

Under PPPoE, you need to be authenticated by ID & Password to use Internet service.

1. When you click PPPoE, you can enter User ID, User Password, confirm Password.

PPPoE Configuration

Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
User ID	<input style="border: 2px solid red;" type="text"/>
User Password	<input style="border: 2px solid red;" type="password"/>
Confirm Password	<input style="border: 2px solid red;" type="password"/>

Notice : Please make sure to set up "Network Status Notify" option to get IP address through e-mail when PPPoE option is selected. Otherwise, there is no way to get changed IP address.

2. Please enter your ID & Password provided by your ISP.
3. Enter your Password again in Confirm Password field.

Please click Apply button to save new setting values. If you don't apply new settings, please click Back to go back to previous page.

3.3. Network Ports

You can enter various Port numbers, which are used by FlexWATCH® Server, in order to communicate with Client PC. Currently FlexWATCH® Server uses HTTP Port, NIPP Port, NVCP-Rx Port, and Audio Port.

3.3.1. HTTP Port

1. HTTP Port is used for Web communication between Client PC and FlexWATCH® Server. By assigning different HTTP port number for each server and configure port-forwarding feature of Router, you can install more than one server behind the router. For more information about this, please contact your local vendor.
2. Default value is 80 and it can be up to 65535.



** If HTTP Port number is changed, you should enter HTTP Port number with your IP address in URL section of Web browser.
 (ex. If FlexWATCH® Server IP address is 192.168.1.100 and HTTP Port: 8080, then it should be like <http://192.168.1.100:8080>)*

3.3.2. NIPP (Network Image Provider Protocol) Port [FW-5450 Only]

1. This is a port through which archived video can be playback through Internet. If NIPP Port is not open to Internet no recorded video can be played back.
2. Default value is 50000 and can be between 10000 and 65535.

3.3.3. NVCP-Rx (Network Video Control Protocol) Port [FW-5450 Only]

1. Rx port is a TCP port number through which NVR server can communicate with FlexWATCH® server so that video can be transmitted into NVR server.
2. Default value is 50100 and can be between 10000 and 65535.
3. Active mode: NVR actively connects to other FlexWATCH® Servers on the network and receives data from them.

3.3.4. NVCP-Tx (Network Video Control Protocol) Port [FW-3450 & FW-1130 & FW-3150 Only]

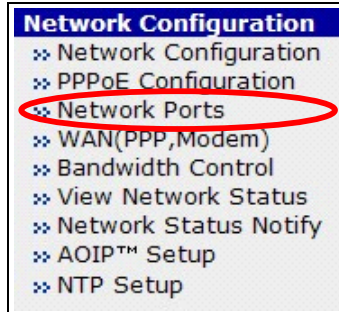
1. Tx port is a TCP port number through which FlexWATCH server can communicate with other devices such as FW-5440 or FW-5000 NVR servers.
2. Default value is 50200 and can be between 10000 and 65535.
3. Passive mode: Other FlexWATCH® Servers on the Network connect to your NVS and they receive data from your NVS.

3.3.5. Audio Port

Audio Port is a network port that gets audio input from user's PC and sends out to audio out port of FlexWATCH® Server. The default value is UDP 32001 and can be between 10000 and 65535.

3.3.6. Network Ports Configuration

1. Click "Network Ports" of Network Configuration group.



2. Please enter HTTP Port, NIPP Port, NVCP-Rx Port and Audio Port.

Network Ports Configuration

HTTP Port	<input type="text" value="80"/>	(Default:80, 80 ~ 65535)
NIPP Port	<input type="text" value="50000"/>	(Default:50000, 10000 ~ 65535)
NVCP-Rx Port	<input type="text" value="50100"/>	(Default:50100, 10000 ~ 65535)
Audio Port	<input type="text" value="32001"/>	(Default:32001, 10000 ~ 65535)

Notice

- HTTP Port : For web access and video transmission.
- NIPP Port : Network Image Provider Protocol.
This is TCP port for search and playback of archived video in the NVR server by remote player.
- NVCP Rx port : This is another video control and communication TCP port besides HTTP server port to receive video data from Network camera or Video server, when the NVR server is set to Passive mode. If NVR is set to Active Mode, no need to open NVCP port.
- Audio Port : This is UDP port to send Audio data from a remote client to FW-server.

3. Click Apply button to save new setting values.

3.4. WAN-Modem

Server is designed to make a call to ISP or can receive a call from outside so that server can establish Internet connect to send FTP, e-mail or send video & data through PSTN line or other medium. This is best alternative when the broadband Internet access is not available. You will have a PSTN modem installed for FlexWATCH® to establish PPP connection through PSTN modem. The network interface through PPP connection will work as WAN port.

3.4.1. PPP Server (Dial-In)

This mode is that FlexWATCH® works as a PPP Server. There will be a call from a client PC to FlexWATCH® and FlexWATCH® will receive the call to establish the PPP connection.

- Local IP Address will be assigned to FlexWATCH® and Remote IP Address will be assigned to the other party's device. Therefore, if Client PC makes a call to FlexWATCH®, FlexWATCH® gets the Local IP Address whereas Client PC gets the Remote IP Address.

Local IP address:

System default IP address (**192.168.2.1**) resides in the FlexWATCH® server for **modem connection** only. So when you connect the FlexWATCH® server from remote PC using dial-up networking and physical connection is made, you need to run your web browser and enter this system default IP address (**192.168.2.1**) to view live video. You can change this system default IP address as well. But it is recommended not to change system default IP address for modem connection to prevent any possible error.

Remote IP address:

IP address which is automatically given to remote client PC by FlexWATCH® server when FlexWATCH® server is connected by remote client PC using dial-up networking. This IP address (**192.168.2.2**) is for data communication between FlexWATCH® server and Remote client PC. So **you do not need to change this IP address**. But if you change default IP address of FlexWATCH® server (**192.168.2.1**) for modem connection to different class of IP address, you need to change remote IP address to the same class of IP to match the IP class.

Notice) Note that when Local IP address is change, remote IP address should be changed into the same class of the IP address.

- You can select Authentication Mode among PAP, CHAP, or None

PAP	Connection is made by User ID & Password registered below sections.
CHAP	With User ID, Password, it applies another encryption method for higher security.
NONE	Do not use authentication mode.

- In order to use PAP or CHAP authentication mode you need to register at least one user. You can register up to 3 users for this service.

3.4.2. PPP Client (Dial-Out)

This mode is that FlexWATCH® works as a PPP Client. You can connect to the Internet or other PPP Server through the Modem installed at FlexWATCH® (RS-232).

WAN-Modem : PPP Client (Dial Out)

PPP Server PPP Client

TEL #	<input type="text"/>
User ID	<input type="text"/>
User Password	<input type="text"/>
Confirm User's Password	<input type="text"/>
Default Route	<input checked="" type="checkbox"/>
DNS1	<input type="text" value="168.126.63.1"/>
DNS2	<input type="text" value="168.126.63.2"/>
RS-232 Line Speed	<input type="text" value="115200"/>
User Defined AT-Command1	
	<input type="text" value="AT"/>
User Defined AT-Command2	
	<input type="text" value="AT"/>

Notice : If you check "Default Route", all data pass through WAN-Modem port.

1. Please select "PPP Client" in "WAN (PPP, Modem)" menu.
2. Enter Telephone number in PPP Server field.
3. Enter User ID provided by ISP.
4. Enter User Password provided by ISP.
5. Enter DNS Server IP recommended by ISP.
6. Enter AT command for initializing the communication. (Initializing command is normally 'AT'. But it may sometimes vary based on modems. Please refer to the modem manual for the recommended command for your modem.)



'3COM U.S.Robotics 56K' modem is recommended.

3.5. Bandwidth Control

You can control the bandwidth for FlexWATCH® Server. If out-going data is more than network bandwidth limit, FlexWATCH® will throw away some network data packets.

Bandwidth Control Configuration

Service	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Bandwidth Limit	<input type="text" value="0"/> Kbps

Notice : The bandwidth limit should be over 32.

3.5.1. Bandwidth Control Configuration

1. Please specify whether you use Bandwidth control or not. If you want to use Bandwidth Control, please select Enable.

Bandwidth Control Configuration

Service	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Bandwidth Limit	<input type="text" value="0"/> Kbps

Notice : The bandwidth limit should be over 32.

2. Please input Bandwidth Limit in kbps. This function supports both M-JPEG & MPEG4.

Bandwidth Control Configuration

Service	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Bandwidth Limit	<input type="text" value="0"/> Kbps

Notice : The bandwidth limit should be over 32.



In MPEG4, you might see unstable video streams due to Packet loss, it is strongly recommended

that you use CBR and frame rate control to control data transmission instead of Bandwidth control. This function is recommended for M-JPEG.



This Network Bandwidth control may cause to slow down the access to admin page of FlexWATCH server.

3. Click Apply button to save the new value of the bandwidth limit.

3.6. View Network Status

You can view the current values of Network settings for FlexWATCH® Server.

Network Status	
Common Status	
Gateway	<input type="text" value="10.10.1.1"/>
Gateway Device	<input type="text" value="eth0"/>
DNS1	<input type="text" value="168.126.63.1"/>
DNS2	<input type="text" value="168.126.63.2"/>
LAN Status	
IP Address	<input type="text" value="10.10.225.153"/>
Netmask	<input type="text" value="255.255.0.0"/>
MAC Address	<input type="text" value="00:30:6F:81:01:EB"/>
PPPoE Status	
Connection Status	<input type="text" value="Link is down"/>
IP Address	<input type="text"/>
Netmask	<input type="text"/>
WAN-Modem Status	
Connection Type	<input type="text" value="PPP Server (Dial In)"/>
Connection Status	<input type="text" value="Link is down"/>
Local IP	<input type="text"/>
Remote IP	<input type="text"/>
Netmask	<input type="text"/>
<input type="button" value="Back"/> <input type="button" value="Reload"/>	

If you click Reload button, current setting values will be reloaded.

3.7. Network Status Notify

If network setting of FlexWATCH® Server is changed, E-mail is automatically sent to the recipient. When you select Enable for Mail Notification, under the following situations, FlexWATCH Server will send e-mails of current network settings to pre-registered recipients.

- When the server is connected to PSTN Modem connection with Dial-up to ISP by event
- When the DHCP option is selected
- When the PPPoE option is selected

Network Status Notification

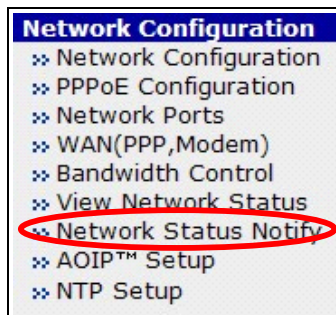
Mail Notification	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SMTP Server	<input style="width: 90%;" type="text"/>
Authentication Login	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
User ID	<input style="width: 90%;" type="text"/>
Password	<input style="width: 90%;" type="text"/>
Sender	<input style="width: 90%;" type="text"/>
1st Recipient	<input style="width: 90%;" type="text"/>
2nd Recipient	<input style="width: 90%;" type="text"/>
3rd Recipient	<input style="width: 90%;" type="text"/>
===== User-Defined Message =====	
<input style="width: 95%;" type="text"/>	
<input style="width: 95%;" type="text"/>	
<input style="width: 95%;" type="text"/>	
<input style="width: 95%;" type="text"/>	
<input type="button" value="Back"/> <input type="button" value="Apply"/> <input type="button" value="Reload"/>	

Network Status Notification Menu

Mail Notification	Enable : using E-mail Disable : not using E-mail
SMTP Server	SMTP Server address
Authentication Login	Select whether you use Authentication login or not
User ID	User ID for Authentication Login
Password	User Password for Authentication Login
Sender	Sender's E-mail address
Recipient1's Email Address	Recipients' E-mail addresses (Max. 3 Recipients)
Recipient2's Email Address	
Recipient3's Email Address	
User Defined Message	User defined message attached to E-mail

3.7.1. Network Status Notify Configuration

1. Click "Network Status Notify" of Network Configuration group.



2. Select Enable if you want to use Mail Notification function.

Mail Notification	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SMTP Server	<input type="text"/>
Authentication Login	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
User ID	<input type="text"/>
Password	<input type="text"/>
Sender	<input type="text"/>
1st Recipient	<input type="text"/>
2nd Recipient	<input type="text"/>
3rd Recipient	<input type="text"/>

3. Enter address of SMTP Server.

- ✓ SMTP Server gets sender's e-mail and relays it to recipients.

Mail Notification	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SMTP Server	<input type="text"/>
Authentication Login	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
User ID	<input type="text"/>
Password	<input type="text"/>
Sender	<input type="text"/>
1st Recipient	<input type="text"/>
2nd Recipient	<input type="text"/>
3rd Recipient	<input type="text"/>

4. Select Enable for Authentication Login and please enter User ID & Password provided by SMTP server.

Mail Notification	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SMTP Server	<input type="text"/>
Authentication Login	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
User ID	<input type="text"/>
Password	<input type="text"/>
Sender	<input type="text"/>
1st Recipient	<input type="text"/>
2nd Recipient	<input type="text"/>
3rd Recipient	<input type="text"/>

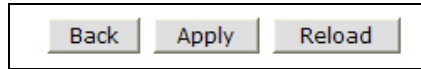
5. Enter Sender's e-mail address in Sender field and Recipients' e-mail address in Recipient field. You can enter up to 3 recipients.

Sender	<input type="text"/>
1st Recipient	<input type="text"/>
2nd Recipient	<input type="text"/>
3rd Recipient	<input type="text"/>

6. Enter User Defined Message, which will be attached the notification e-mail.

<p>===== User-Defined Message =====</p> <input type="text"/>
--

7. Click Apply button to save new setting values. Reload button will restore the previous values.

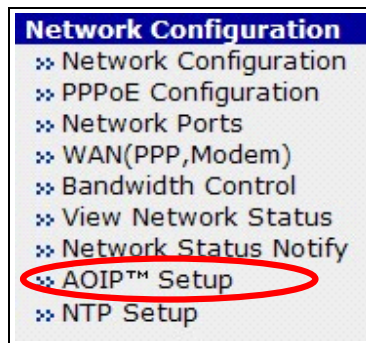


3.8. AOIP™ Setup

AOIP (Always-On-IP) is an IP gateway through which user can access the FlexWATCH server when it is connected to Dynamic IP address. Thus, if the server should be connected to the Dynamic IP network and you want to view live video from anywhere, it is the right solution for you. First, you need get a User account provided by supplier. Secondly, you need to configure your FlexWATCH server to be registered at AOIP server by AOIP™ Port Setup.

3.8.1. AOIP™ Configuration

1. Click AOIP™ Setup of Network Configuration group.



2. Select Enable in AOIP Service.
3. Please enter the address of AOIP™ Server, in which your account is registered. For example, if you use AOIP™ Server in Korea provided by Seyeon Tech Co., Ltd., you may enter www.aoip.co.kr. If your local supplier runs their own AOIP™ Server, you shall enter the address of their local AOIP™ Server.

AOIP Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
AOIP Server IP	<input type="text" value="www.aoip.co.kr"/>
HTTP Port	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
NIPP Port	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
NVCP-Rx Port	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

- ✓ The address of AOIP™ Server in Korea is www.aoip.co.kr.

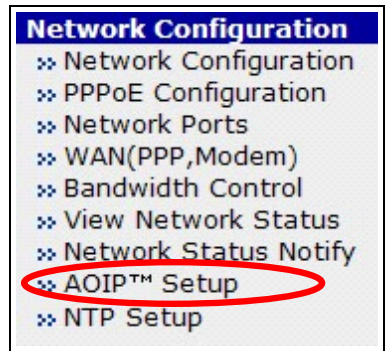
4. Select which ports you want to use.

AOIP Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
AOIP Server IP	<input type="text" value="www.aoip.co.kr"/>
HTTP Port	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
NIPP Port	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
NVCP-Rx Port	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

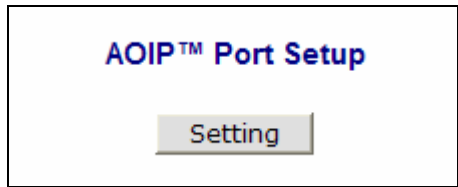
5. Please click Apply button to save new settings.

3.8.2. AOIP™ Port Setup

1. Click AOIP™ Setup of Network Configuration group.



2. Click Setting Button in AOIP™ Port Setup.



3. Please enter your AOIP user ID & password in pop-up window.

A screenshot of the 'Enter Network Password' dialog box. It contains the following fields and options:

- Site: www.aoip.co.kr
- Realm: WebServer
- User Name:
- Password:
- Save this password in your password list
- Buttons: OK, Cancel

4. Please Click More button for more ports to be set.

AOIP Port Registration

Video	<input type="text"/>	(Default:80, 80 ~ 65535)	<input type="button" value="More"/>
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5. Enter the port number you want to use for each service port.

AOIP Port Registration

Video	<input type="text"/>	(Default:80, 80 ~ 65535)	<input type="button" value="More"/>
Player	<input type="text"/>	(Default:50000, 10000 ~ 65535)	
Log	<input type="text"/>	(Default:53000, 10000 ~ 65535)	
Video-Rx (NVCP-Rx)	<input type="text"/>	(Default:50100, 10000 ~ 65535)	
Video-Tx (NVCP-Tx)	<input type="text"/>	(Default:50200, 10000 ~ 65535)	

6. Click Apply button to save new setting values



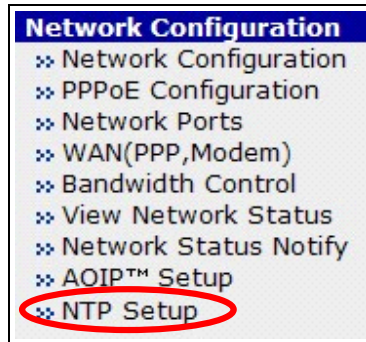
This AOIP Port Registration can also be done in AOIP™ Server. AOIP™ Server provides you with Registration, Search, Delete, Edit service, etc.

3.9. NTP Setup

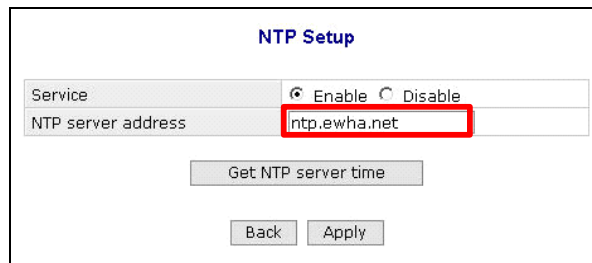
FlexWATCH® Server can get time information from a NTP server and FlexWATCH® Server can be set by that time.

3.9.1. NTP Setup Configuration

1. Click “NTP Setup” in Network Configuration group.



2. If Service is selected as Enable, FlexWATCH® server will synchronize its time with acquiring time from Time Server when booting. Please enter the address of a Time Server in NTP Server address field.



3. If you want to set FlexWATCH® server time manually with acquiring time from Time Server, please click 'Get NTP Server time'. You can check out the changed time in Date & Time menu in System Information group.
4. Click Apply button to save new setting values.
5. If NTP service is enabled, FlexWATCH® server time will be synchronized with time from NTP Server once a day.

3.9.2. FlexWATCH® Server Time

In general, most cases of OS, when booting, its time needs to be set. So does Linux. There are two ways of getting current time. First one is by system's RTC and the other one is by Time Server via network.

RTC time itself has some inaccuracy, meaning that as time goes by, the inaccuracy will be bigger. However, acquiring time from Time Server is more accurate than RTC time even though there may be some inaccuracy due to network latency. FlexWATCH® server provides you with these two ways of setting its time.

3.9.2.1. Daylight Saving Time

If you use FlexWATCH® Server in a country where Daylight Saving time applies, please select Change Time Zone and change the time zone to that area. Then

3.9.2.2. UTC & Local Time

UTC (Universal Time) means the standard time while local time means your local area time. The

internal time of Linux is in UTC and this UTC will be converted to local time based on Time Zone.

3.9.2.3. NTP

The acquiring time from NTP server is UTC. FlexWATCH server converts this UTC to local time by Time Zone. Thus NTP server which is not from your local area can be used for NTP service. However, there may be some network latency in case that you use a NTP server in long distance.

4. Device Configuration

You can configure camera related settings for FlexWATCH®.

4.1. Serial Ports

Basically COM port is for Console and AUX is for PTZ; however, they can be used for other functions.

Serial Ports Configuration

COM Mode	Console ▼
AUX Mode	PTZ ▼

Back
Apply

Please click below link to configure more details.

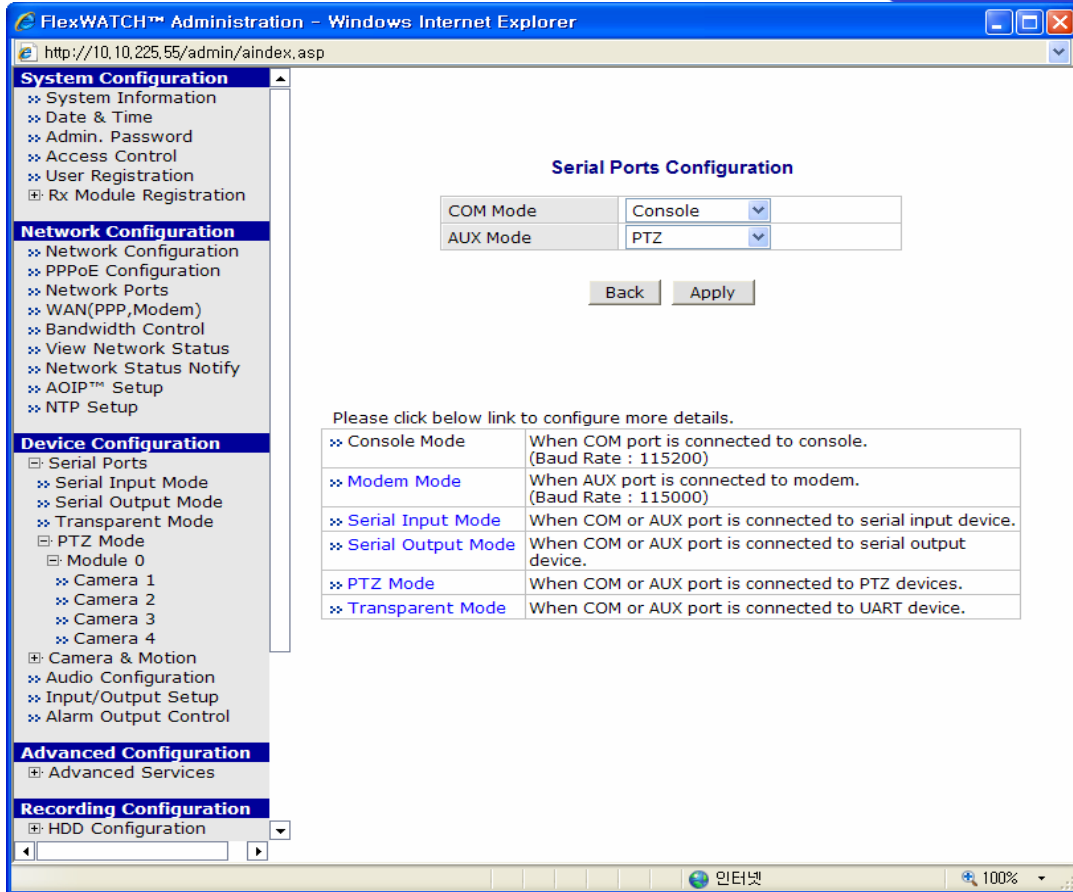
❖ Console Mode	When COM port is connected to console. (Baud Rate : 115200)
❖ Modem Mode	When AUX port is connected to modem. (Baud Rate : 115000)
❖ Serial Input Mode	When COM or AUX port is connected to serial input device.
❖ Serial Output Mode	When COM or AUX port is connected to serial output device.
❖ PTZ Mode	When COM or AUX port is connected to PTZ devices.
❖ Transparent Mode	When COM or AUX port is connected to UART device.

4.1.1. Serial Input Mode

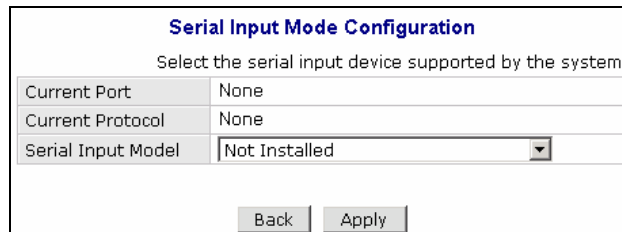
Serial Input Mode is for getting inputs from various sensors through AUX port of FlexWATCH® Server and sending you Camera's images by E-mail, FTP or Alarm Output. For example, when the water level of a dam reaches the specific level, FlexWATCH Server can send you the image of the water level. Or after checking the speed of cars on highway, if it reaches the speed limit, FlexWATCH server can send the image of car plate number to you. These kinds of functions can be managed by COM and AUX ports.

1. Serial Input Mode configuration

In web Admin page, please go to Device Configuration group. And click Serial Ports and select Serial Input in COM Mode. Click Apply button.



2. When you click Serial Input Mode, you will see below menu.



- Current Port: current port number will appear.
- Current Protocol: current protocol will appear.
- Serial Input Model: Please Select Model name for Serial Input mode.

Below is the screen for Speed sensor AGILIS-HE820-SINGAPORE model.

Serial Input device protocol can separately be uploaded into the system per customer needs. User can upload serial input device protocol file which is provided by manufacturer only. This function is not for general use. Thus, if you need more close information about this, please contact your local distributor or manufacturer for further information, sales@flexwatch.com.

Serial Input Mode Configuration

Select the serial input device supported by the system.

Current Port	None
Current Protocol	None
Serial Input Model	AGILIS-HE820-SINGAPORE
Upper Limit	-1
Lower Limit	-1
Initial String Length	0
Initial String Data	
(Speed) Delay configuration	
(Speed)Delay	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Internal process delay	0
Sensor Aiming Position	0
Camera Aiming Position	0
Add Vehicle length to calculate delay time	<input type="radio"/> Add <input checked="" type="radio"/> Ignore

- Upper Limit: Maximum value
- Lower Limit: Minimum value
- Initial String Length: Initial string length of Sensor
- Initial String Data: Initial string data of Sensor
- (Speed)Delay: Delay enable/disable selection for sensor input
- Internal process delay: Value of sensor input delay
- Sensor Aiming Position: Value of Sensor Aiming Position
- Camera Aiming Position: Value of Camera Aiming Position
- Add Vehicle length to calculate delay time: Vehicle length add/ignore selection

4.1.2. Serial Output Mode

The system supports to relay third party command to target device through Serial output device control mode. Through this, user defined message can be reached to target device.

The system supports two different modes. One is X10 protocol for PLC (Power Line Communication) and UART (Universal Asynchronous Receiver Transmitter) device.

By using Serial Output Mode, you can send UART (Universal Asynchronous Receipt and Transmission) device commands to FlexWATCH® Servers. FlexWATCH® can control PTZ devices,

Multiplexer, Access control box, X10 Protocol, z256 protocol, etc. by RS-232 or RS-485(422) communication.

You can use By-Pass, X10, and Z256 in Serial Output Mode.

Serial Output Mode Configuration	
Current Port	None
Line Mode	RS-232
Baud Rate	38400
Data Bit	8 bit
Stop Bit	1 bit
Parity Bit	None
Mode	<input checked="" type="radio"/> By-Pass <input type="radio"/> X10 <input type="radio"/> Z256
<input type="button" value="Back"/> <input type="button" value="Apply"/>	

4.1.3. Transparent Mode

If you use Transparent Mode, you can use 2 FlexWATCH® servers to relay the signal from one UART device to another UART device. It is like direct communication between two UART devices. .

Transparent Mode Configuration	
Current Port	None
Line Mode	RS-485
Baud Rate	9600
Data Bit	8 bit
Stop Bit	1 bit
Parity Bit	None
Network Protocol	UDP
Peer IP	127.0.0.1
Network Port	32000 (Default:32000, 10000 ~ 65535)
Data Start Pattern	<input type="checkbox"/>
Data Size	0
<input type="button" value="Back"/> <input type="button" value="Apply"/>	

- Line Mode: Communication protocol
- Baud Rate: Communication rate
- Data Bit: Data bit size
- Stop Bit: Stop bit size
- Parity Bit: Parity bit type
- Network Protocol: Network Protocol type for data transmission
- Peer IP: IP of the other connected FlexWATCH server
- Network Port: Network Port number to be used
- Data Start Pattern: Data Start pattern selection. If you don't want to use, uncheck it.
- Data Size: Data size to be transmitted. If you don't use, do not enter a value.

4.1.4. PTZ Mode

PTZ (Pan/Tilt/Zoom) device connected to the server can be controlled through either standard web browser or specific application program over IP network.

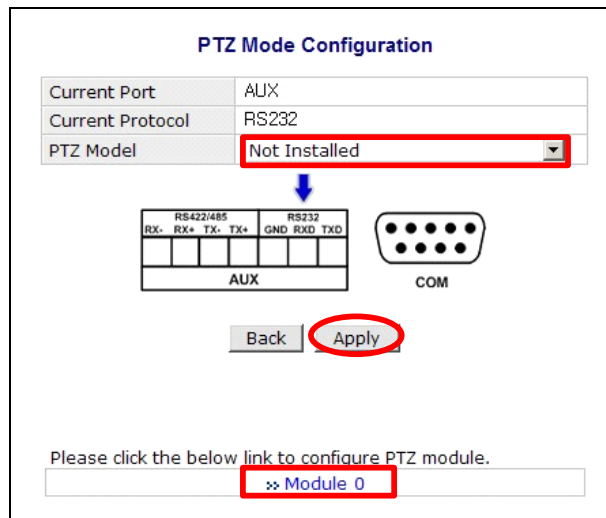
When you install a RS-485/422 interfaced PTZ model:

PTZ device has to be connected to **RS422/485** in AUX port.


When you install a RS-232 interfaced PTZ model:


PTZ device has to be connected to **RS232** in AUX port.

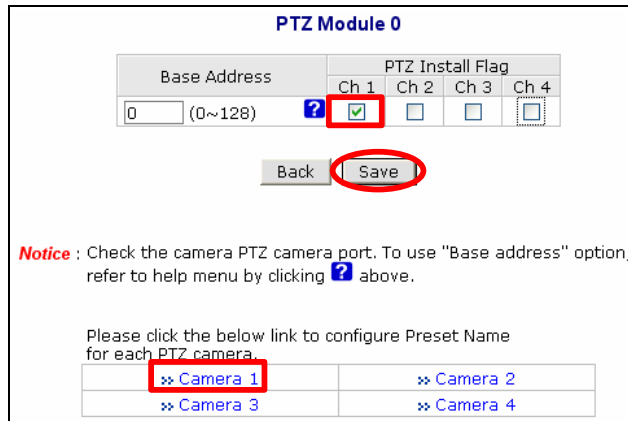
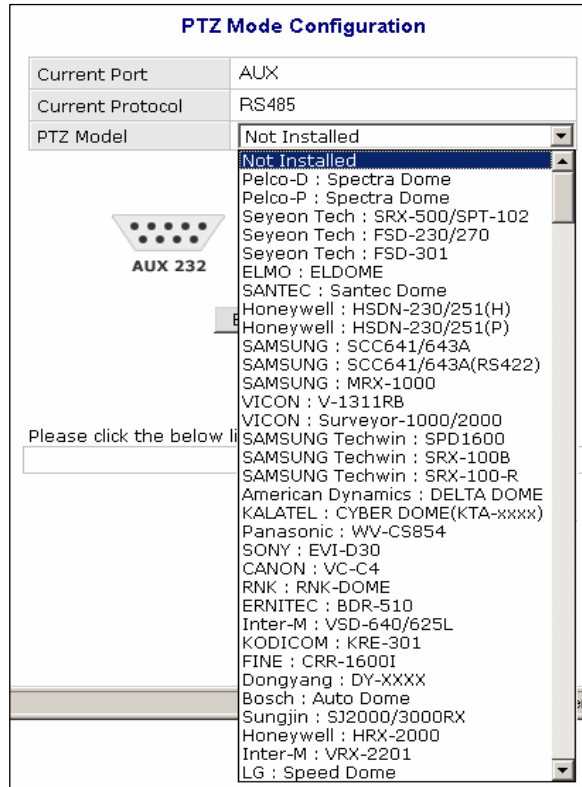
After making connection to AUX port, please select PTZ camera or Receiver model in the PTZ list. And click “Apply” button to save new settings.



3. After selecting the model name, click “Module 0”. And then, please check channel number which PTZ camera is connected to.

 * Before you purchase a Receiver or PTZ camera, please contact your local supplier or Seyeon Tech Co., Ltd. to check if the PTZ device is supported by FlexWATCH Server or not.

 * You can see current supported PTZ protocol by looking at the PTZ model list. (Currently 34 PTZ camera models are supported and more PTZ devices would be added later.)



4. Base Address + CH # should be equal to PTZ camera address.
 Example) Base Address: 0
 FW3450 ch1 ~ ch4: value of 1~4.
 PTZ camera address connected to CH1: 1
 PTZ camera address connected to CH2: 2
 PTZ camera address connected to CH3: 3
 PTZ camera address connected to CH4: 4
5. After checking channel numbers, please click Save button to save new setting values. The above figure is when only CH1 has a PTZ device connected.)
6. If PTZ camera or Receiver has preset function. You can configure preset positions by clicking

Camera number.

Preset Name at PTZ Camera 1

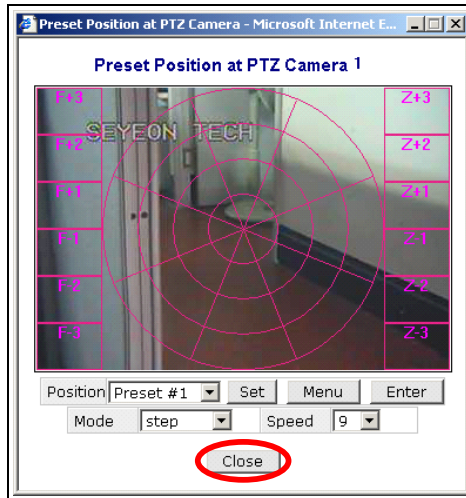
No.	¹ Preset Name	No.	Preset Name
1	Preset #1	17	Preset #17
2	Preset #2	18	Preset #18
3	Preset #3	19	Preset #19
4	Preset #4	20	Preset #20
5	Preset #5	21	Preset #21
6	Preset #6	22	Preset #22
7	Preset #7	23	Preset #23
8	Preset #8	24	Preset #24
9	Preset #9	25	Preset #25
10	Preset #10	26	Preset #26
11	Preset #11	27	Preset #27
12	Preset #12	28	Preset #28
13	Preset #13	29	Preset #29
14	Preset #14	30	Preset #30
15	Preset #15	31	Preset #31
16	Preset #16	32	Preset #32

²

Notice : The preset name can be 63-alpha-numeric or 31-unicode.
(It means your own characters.)

³

7. Maximum 32 preset positions can be configured and you can change their names.
8. After changing preset names for each preset position, please click “Save” button.
9. Then, please click “Preset & Menu” to set preset position for each preset. You can see below image in a pop-up window and please set your desired position by PTZ function. Click “Set” to save new preset position.
10. After all the preset settings for each preset, Please click “Close” button to close the pop-up window.



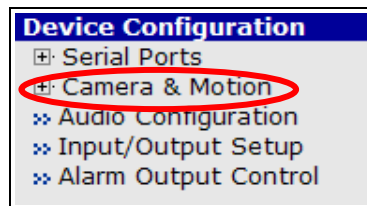
4.2. Camera & Motion [FW-3450 & FW-5450 Only]

This is to configure camera related settings such as camera value string and video quality setting. You can configure different setting values for each channel.

- ✓ Channel: Camera connected to FlexWATCH® Server.

4.2.1. Camera & Motion Configuration

1. Click "Camera & Motion" in Device Configuration group.



2. You can set various settings such as video data types and information attached to the image.

Camera & Motion Configuration

Default Video Format	<input checked="" type="radio"/> NTSC <input type="radio"/> PAL
Video with UART sensor data	<input type="checkbox"/> Enable
Video with user defined message	<input type="checkbox"/> Enable
Video with PPP status	<input type="checkbox"/> Enable
Video with camera name	<input type="checkbox"/> Enable
Video with server name	<input type="checkbox"/> Enable
Video with IP address	<input type="checkbox"/> Enable
Time Stamp	<input type="checkbox"/> Enable
Image Size	352x240 / 352x288 ▼
Frame Rate Control	30 fps ▼
Encoding Standard	<input type="radio"/> M-JPEG <input checked="" type="radio"/> MPEG-4

- Default Video Format: You can select NTSC or PAL for your camera attached to FlexWATCH® Server.
- Video with UART sensor Data: If you check Enable, UART sensor Data will be sent with its video data.
- Video with user defined message: If you check Enable, user defined message will be sent with its video data.
- Video with PPP status: If you check Enable, PPP status will be sent with its video data.
- Video with camera name: If you check Enable, camera name will be sent with its video data.
- Video with server name: If you check Enable, server name will be sent with its video data.
- Video with IP address: If you check Enable, IP address will be sent with its video data.
- Time Stamp: Time Stamp will be encoded with video data.
- Image Size: You can select Image Size which applies to all channels.

4 types of Image Sizes as below:

Video Format	Full	Large	Normal	Small
NTSC	704 * 480	704 * 240	352 * 240	176 * 112
PAL	704 * 576	704 * 288	352 * 288	176 * 144

- Frame Rate Control: You can select Frame Rate in FPS which applies to all channels. Thus, you can control server traffic by this parameter.
- Encoding Standard: You can select either M-JPEG or MPEG-4 which applies to all channels.



M-JPEG: each video frame or interlaced field of a digital video sequence is separately compressed as a JPEG image. Thus it requires more bandwidth than MPEG-4. However, the quality of a still image is better than MPEG-4.



MPEG4: It consists of I-Frame (standard frame) and P-Frame (difference between pictures). Thus it

requires less bandwidth than M-JPEG. However, if it loses I-Frame or P-Frame due to unstable network, it affects the motion streaming. And also it has lower quality of a still image than M-JPEG. You can control number of P-Frames in FlexWATCH Server.

3. Click "Save" button to save new setting values.

4.2.2. Camera Configuration

Through camera configuration mode, you can adjust the video quality to meet your requirement (FW-3450 & FW-5450 has 4 channels.) Each channel refers to cameras connected to FW-3450 & FW-5450.

1. Please click a Camera number in Camera & Motion Configuration.

Please click the below link to configure each camera.

※ Camera 1	※ Camera 2
※ Camera 3	※ Camera 4

2. Configure the Camera as you wish.

Camera Configuration

Camera Number	1
Camera Name	<input type="text" value="Cam_1"/>
Camera Install	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Video Source	<input checked="" type="radio"/> Color <input type="radio"/> Gray
Rate Control Mode	VBR Mode ▾
Image Quality	Normal ▾
GOP Structure	4 [1~16]
Hue	0 (-100 ~ 100)
Saturation	0 (-100 ~ 100)
Contrast	0 (-100 ~ 100)
Brightness	0 (-100 ~ 100)
Motion Sensitivity	0 (-100 ~ 100 : 100 is hypersensitive.)
Motion Detection	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

In case of MPEG4

Camera Configuration

Camera Number	1
Camera Name	<input type="text" value="Cam_1"/>
Camera Install	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Video Source	<input checked="" type="radio"/> Color <input type="radio"/> Gray
Image Quality	Normal ▾
Hue	0 (-100 ~ 100)
Saturation	0 (-100 ~ 100)
Contrast	0 (-100 ~ 100)
Brightness	0 (-100 ~ 100)
Motion Sensitivity	0 (-100 ~ 100 : 100 is hypersensitive.)
Motion Detection	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

In case of M-JPEG

- Camera Number: Channel number, which can't be changed. (1 ~ 4)
- Camera Name: Channel's name with 21 Alpha-numeric letters or 10 Unicode letters.
- Camera Install: When a camera is connected to FlexWATCH server, if you select Enable you can see images from Camera, otherwise, you can't see images from camera.
- Video Source: If you select Gray, the images from camera will be in Gray mode.
- Image Quality settings

MPEG	Rate Control Mode : VBR (Variable Bit Rate) : A Frame is made based on	Image Quality You can control 6 levels (Low Compression, Highest, High, Normal, Low, and Lowest).
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	Image quality & GOP Structure. Frame sizes vary depending on bandwidth.	GOP Length between I-Frame and next I-Frame. P-frame is filled up between them.
	Rate Control Mode : CBR (Constant Bit Rate) : A frame is made based on Bit Rate Control and GOP structure but the size of frames is the same.	Bit Rate Control Total number of bits being encoded in a second. The bigger Bit Rates, the better image quality. GOP Length between I-Frame and next I-Frame. P-frame is filled up between them.
JPEG		Image Quality You can control 6 levels (Low Compression, Highest, High, Normal, Low, and Lowest).

✓ Image Quality : Compressed Image quality

Low Compression	Highest	High	Normal	Low	Lowest
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✓ Going left means better image quality with higher network bandwidth.

✓ Going right means less network bandwidth with lower image quality.

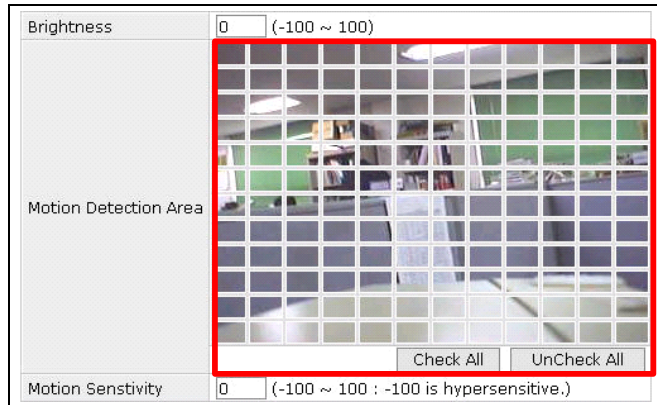
- Hue: You can control color level of Image between -100 and 100.
 - Saturation: You can control saturation level between -100 and 100.
 - Contrast: You can control contrast level between -100 and 100.
 - Brightness: You can brightness saturation level between -100 and 100.
 - Motion Sensitivity: You can control motion sensitivity under Motion Detection Area.
-The value can be between -100 and 100. (100 is most sensitive.)
 - Motion Detection: If you select Enable, you can set desired motion detected area by yourself.
3. After all settings have been done, click Apply button. If you click Default, all the values will be restored with factory default values.

4.2.3. Motion Detection Area Configuration

1. Select Enable in Motion Detection.



2. You can set motion detected area by clicking each block.

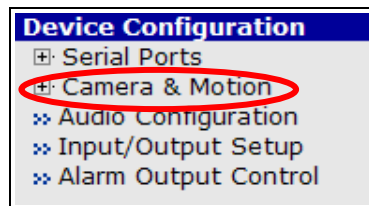


- Check All: you can set all the motion detected area at once.
- UnCheck All: Clear all the motion detected area.
- Motion Sensitivity: you can change motion Sensitivity between -100 and 100. (100 is most sensitive.)

4.3. Camera & Motion [FW-1130 & FW-3150 Only]

This is to configure camera related settings such as camera value string and video quality setting. You can configure different setting values for each channel.

1. Click "Camera & Motion" in Device Configuration group.



2. You can set various settings such as video data types and information attached to the image.

Camera & Motion Configuration

Default Video Format		<input checked="" type="radio"/> NTSC <input type="radio"/> PAL
Video with UART sensor data		<input type="checkbox"/> Enable
Video with user defined message		<input type="checkbox"/> Enable
Video with PPP status		<input type="checkbox"/> Enable
Video with camera name		<input type="checkbox"/> Enable
Video with server name		<input type="checkbox"/> Enable
Video with IP address		<input type="checkbox"/> Enable
Frame Rate Control		30 fps ▼
Primary Stream	Image Size	352x240 / 352x288 ▼
	Encoding Standard	<input checked="" type="radio"/> M-JPEG <input type="radio"/> MPEG-4
Secondary Stream	Image Size	352x240 / 352x288 ▼
	Encoding Standard	<input checked="" type="radio"/> M-JPEG <input type="radio"/> MPEG-4

- Default Video Format: You can select NTSC or PAL for your camera attached to FlexWATCH® Server.
- Video with UART sensor data: If you check Enable, UART sensor Data will be sent with its video data.
- Video with user defined message: If you check Enable, user defined message will be sent with its video data.
- Video with PPP status: If you check Enable, PPP status will be sent in video data header.
- Video with camera name: If you check Enable, camera name will be sent with its video data.
- Video with server name: If you check Enable, server name will be sent with its video data.
- Video with IP address: If you check Enable, IP address will be sent in its video data header.
- Frame Rate Control: You can select Frame Rate in FPS which applies to all channels. Thus, you can control server traffic by this parameter. It applies to both Primary Stream and Secondary Stream.
- Image Size: You can select Image Size for each Stream.

✓ 4 types of Image Sizes as below :

	Full	Large	Normal	Small
NTSC	704 * 480	704 * 240	352 * 240	176 * 112
PAL	704 * 576	704 * 288	352 * 288	176 * 144

- Encoding Format: You can select either M-JPEG or MPEG-4 for Primary Stream and Secondary Stream.



The Image Size of Primary Stream equals to the Maximum Image Size of Secondary Stream. Because video source of Secondary Stream is from Primary Stream.

✓ You can configure CCD functions for FW-1130 as below.

BUILT IN CAMERA CONTROL			
FLK	<input type="checkbox"/> Enable	AGC	<input type="checkbox"/> Enable
BLC	<input type="checkbox"/> Enable	ELC	<input checked="" type="checkbox"/> Enable
<input type="button" value="Apply"/>			

- FLK (Flickerless): To protect video flickering caused by AC frequency.
- AGC (Automatic Gain Control): To control CCD sensitivity by Gain control.
- BLC(Back Light Compensation): To control the image quality under Back Light
- ELC (Electronic Light Control): To control brightness by automatic shutter speed.



Configuration of Secondary Stream is limited because video source of Secondary Stream is from Primary Stream. Configuration for Camera Install, Video Source to Gray, Hue, Saturation, Contrast, Brightness, and Motion Detection is dependent on Primary Stream's settings.

3. To configure Primary Stream, please click Primary Stream.

Please click the below link to configure each camera.

⇄ Primary Stream	⇄ Secondary Stream
----------------------------------	------------------------------------

Camera Configuration (Primary Stream)	
Camera Name	<input type="text" value="Camera 1"/>
Camera Install	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Video Source	<input checked="" type="radio"/> Color <input type="radio"/> Gray
Rate Control Mode	VBR Mode ▾
Image Quality	Normal ▾
GOP Structure	<input type="text" value="4"/> [1~16]
Hue	<input type="text" value="0"/> (-100 ~ 100)
Saturation	<input type="text" value="0"/> (-100 ~ 100)
Contrast	<input type="text" value="0"/> (-100 ~ 100)
Brightness	<input type="text" value="0"/> (-100 ~ 100)
Motion Sensitivity	<input type="text" value="0"/> (-100 ~ 100 : 100 is hypersensitive.)
Motion Detection	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
<input type="button" value="Back"/> <input type="button" value="Apply"/> <input type="button" value="Default"/>	

In case of MPEG4

- Camera Name: Channel's name with 21 Alpha-numeric letters or 10 Unicode letters.

Camera Configuration (Primary Stream)	
Camera Name	<input type="text" value="Camera 1"/>
Camera Install	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Video Source	<input checked="" type="radio"/> Color <input type="radio"/> Gray
Image Quality	Normal ▾
Hue	<input type="text" value="0"/> (-100 ~ 100)
Saturation	<input type="text" value="0"/> (-100 ~ 100)
Contrast	<input type="text" value="0"/> (-100 ~ 100)
Brightness	<input type="text" value="0"/> (-100 ~ 100)
Motion Sensitivity	<input type="text" value="0"/> (-100 ~ 100 : 100 is hypersensitive.)
Motion Detection	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
<input type="button" value="Back"/> <input type="button" value="Apply"/> <input type="button" value="Default"/>	

In case of M-JPEG

- Camera Install: When a camera is connected to FlexWATCH server, if you select Enable you can see images from Camera, otherwise, you can't see images from camera.
- Video Source: If you select Gray, the images from camera will be in Gray mode.
- Image Quality settings

MPEG	Rate Control Mode : VBR (Variable Bit Rate) : A Frame is made based on Image quality & GOP Structure. Frame sizes vary depending on bandwidth.	Image Quality You can control 6 levels (Low Compression, Highest, High, Normal, Low, and Lowest).
		GOP Length between I-Frame and next I-Frame. P-frames are filled up between them.
	Rate Control Mode : CBR (Constant Bit Rate) : A frame is made based on Bit Rate Control and GOP structure but the size of frames is the same.	Bit Rate Control Total number of bits being encoded in a second. The bigger Bit Rates, the better image quality.
		GOP Length between I-Frame and next I-Frame. P-frames are filled up between them.
JPEG		Image Quality You can control 6 levels (Low Compression, Highest, High, Normal, Low, and Lowest).

- Image Quality: Compressed Image quality.

Low Compression	Highest	High	Normal	Low	Lowest
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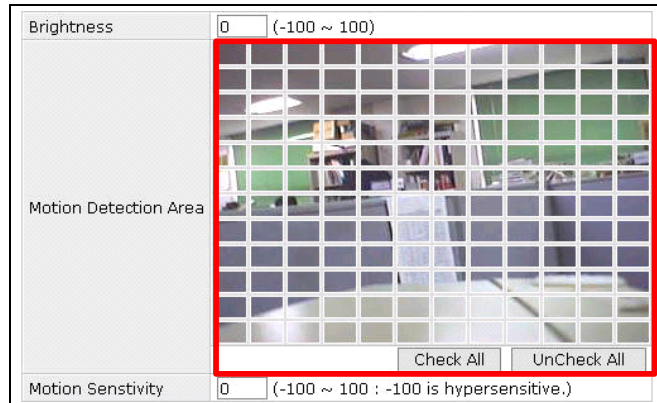
- ✓ Going left means better image quality with higher network bandwidth. .
- ✓ Going right means less network bandwidth with lower image quality.

- Hue: You can control color level of Image between -100 and 100.
- Saturation: You can control saturation level between -100 and 100.
- Contrast: You can control contrast level between -100 and 100.
- Brightness: You can brightness saturation level between -100 and 100
- Motion Sensitivity: You can control motion sensitivity under Motion Detection Area.
-The value can be between -100 and 100. (100 is most sensitive.)
- Motion Detection: If you select Enable, you can set desired motion detected area by yourself.
- After all settings have been done, click Apply button. If you click Default, all the values will be restored with factory default values.

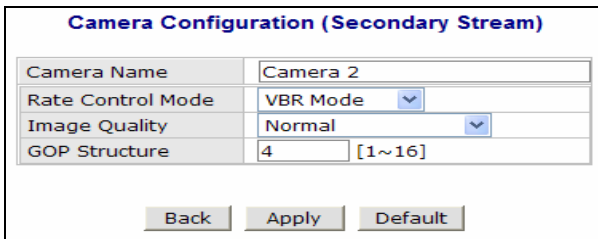
4. Select Enable in Motion Detection.



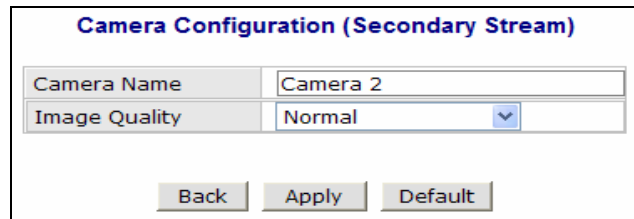
5. You can set motion detected area by clicking each block.



- Check All: can set all the motion detected area at once.
 - UnCheck All: Clear all the motion detected area.
 - Motion Sensitivity: you can change motion Sensitivity between -100 and 100. (100 is most sensitive.)
6. You can configure Secondary Stream.



In case of MPEG-4



In case of M-JPEG



Almost all parameters are dependent on Primary Stream.

4.4. Audio Configuration [FW-3450 & FW-5450 Only]

FW-3450 & FW-5450 support 2-way audio streaming function. Firstly, they get the audio inputs from 4 channels and transmit the audio data with video. And FlexWATCH server also receives the audio data from user's PC and sends out through the Audio output of FlexWATCH server.

Without any external audio devices, you can not only use synchronized audio and video from each channel but also send user's voice or any other sounds to FW-3450 & FW-5450 by PC's microphone and you can hear this audio from FW-3450 & FW-5450 with a speaker.

You can configure the audio functions as below.

Audio Configuration		
Audio Port	32001	Network Ports
Audio Channel 1	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Audio Channel 2	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Audio Channel 3	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
Audio Channel 4	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable

1. Audio Port is a network port that receives audio input from PC. Default value is 32001 and you can change the port number in Network Ports menu.
2. You can select Enable or Disable for each audio channel. If it is enabled, audio input will be transmitted with video data. Otherwise, no audio data will be streamed with video. The default is in Disable.

4.5. Audio Configuration [FW-1130 & FW-3150 Only]

Audio Configuration		
Audio Port	32001	Network Ports
Audio Configuration	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable

1. Audio Port is a network port that receives audio input from PC. Default value is 32001 and you can change the port number in Network Ports menu. .
2. You can enable or disable the audio function.



FW-1130 / FW-3150 have one video input and audio input. Thus, the audio transmission of Primary Stream and Secondary Stream is identical and Enable/Disable will apply to both streams

4.6. Input/Output Setup [FW-3450 & FW-5450 Only]

FW-3450 & FW-5450 provide you with 4 serial input and output ports. For example, you can connect a sensor to serial input and a flashing light to serial output. In this case, you first install the physical devices and assign names to serial devices so that you can distinguish them later when you have many FlexWATCH servers.

Input / Output Setup

No	Input Name	Output Name
1	Di 1	Do 1
2	Di 2	Do 2
3	Di 3	Do 3
4	Di 4	Do 4

No	Input Type	Output Type
1	<input type="radio"/> Normal Open <input checked="" type="radio"/> Normal Close	<input checked="" type="radio"/> Normal Open <input type="radio"/> Normal Close
2	<input type="radio"/> Normal Open <input checked="" type="radio"/> Normal Close	<input checked="" type="radio"/> Normal Open <input type="radio"/> Normal Close
3	<input type="radio"/> Normal Open <input checked="" type="radio"/> Normal Close	<input checked="" type="radio"/> Normal Open <input type="radio"/> Normal Close
4	<input type="radio"/> Normal Open <input checked="" type="radio"/> Normal Close	<input checked="" type="radio"/> Normal Open <input type="radio"/> Normal Close

Notice : The input & Output name can be 31-alpha-numeric or 15-unicode.
(It means your own characters.)

You can enter Input Name and Output Name with up to 31 alpha-numeric letters or up to 15 Unicode letters. After entering names, please click "Apply" button.

4.6.1. Input / Output Type Configuration

- Please select Normal Open Type for normal open type sensor connected to DI. Normal Open means that a switch normally is off and when an event is occurred the switch turns on.
- Please select Normal Close Type for normal close type sensor connected to DI. Normal Close means that a switch normally is on and when an event is occurred the switch turns off.



Please select Input Type in accordance with Sensor Type and select Output Type in accordance with Alarm's working type. Specially, if you physically don't use DI, please select Normal Open for Input Type.

4.7. Input/Output Setup [FW-1130 & FW-3150 Only]

Input / Output Setup		
No	Input Name	Output Name
1	Di 1	Do 1
No	Input Type	Output Type
1	<input type="radio"/> Normal Open <input checked="" type="radio"/> Normal Close	<input checked="" type="radio"/> Normal Open <input type="radio"/> Normal Close

4.7.1. Input / Output Type Configuration

- Please select Normal Open Type for normal open type sensor connected to DI. Normal Open means that a switch normally is off and when an event is occurred the switch turns on.
- Please select Normal Close Type for normal close type sensor connected to DI. Normal Close means that a switch normally is on and when an event is occurred the switch turns off.

● *Please select Input Type in accordance with Sensor Type and select Output Type in accordance with Alarm's working type. Specially, if you physically don't use DI, please select Normal Open for Input Type.*

4.8. Alarm Output Control [FW-3450 & FW-5450 Only]

FW-3450 & FW-5450 have 4 Alarm Outputs. If you select Enable for DO, it is arbeit contact; otherwise, it is break contact.

Alarm Output(DO) Control				
Alarm Output(DO) Port Number	1	2	3	4
Enable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.9. Alarm Output Control [FW-1130 & FW-3150 Only]

FW-3150 has 1 alarm Output. If you select Enable for DO, it is arbeit contact; otherwise, it is break contact.

Alarm Output(DO) Control	
Alarm Output(DO) Port Number	1
Enable	<input type="checkbox"/>

5. Advanced Configuration

You can use various advanced functions such as E-mail notification with pre & post alarm images, FTP notification with pre & post alarm images, Sensor notification and Alarm Output, etc.

5.1. Advanced Services

Advanced service configuration is intended to provide more sophisticated functions which are required by sophisticated users. Thus, if you are not familiar with or not good at advanced features, we recommend you to refer to separate Advanced Services Manual.

Advanced Service

This category shows the detailed method for Advanced Service.

<p>» Buffering Service</p>	<p>This services are needed buffering space(e-mail, ftp and alarm buffering services). Post alarm buffer is defined in each service category.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Total buffer size</td> <td style="text-align: right;">30300</td> <td>kb</td> </tr> <tr> <td>Email,Ftp(Buffered) buffer service</td> <td style="text-align: right;">30 %</td> <td></td> </tr> <tr> <td>Alarm buffer service</td> <td style="text-align: right;">70 %</td> <td></td> </tr> </table> <p style="text-align: center;"><input type="button" value="Save"/></p> <p>Notice : If you change these spaces, you have to reboot after saving flash.</p>	Total buffer size	30300	kb	Email,Ftp(Buffered) buffer service	30 %		Alarm buffer service	70 %	
Total buffer size	30300	kb								
Email,Ftp(Buffered) buffer service	30 %									
Alarm buffer service	70 %									
<p>» Non-buffering Service</p>	<p>This services do not need buffering space.</p>									

Start

Notice : To apply new service configurations, click "Stop" button and click "Start" button again. Otherwise new configurations will not be applied although all service configurations are correctly set up.

Buffering Service Configuration

Total pre-alarm buffer size : **9090** kb
 Current used buffer size : **0** frames

	Ch 1	Ch 2	Ch 3	Ch 4	Sum
Pre-alarm Buffer Size (unit : frame(image))	0	0	0	0	0
Delay between pre-alarm images (unit : 10 msec)	0	0	0	0	

Notice : For pre-alarm, **Sum of all data in the above table should be less than total buffer size**. Pre-alarm buffer size is less than maximum number of pre-alarm images for the services(e-mail,ftp,buffer freezing). For post-alarm,post alarm buffer size is equal to the number of post-alarm images.

*Pre-alarm : Number of pre-alarm images.
 *Post-alarm : Number of post-alarm images.
 *Delay : Delay between post-alarm images.

<p>» E-mail</p>	<p>Configuration of E-mail service to send pre-post alarm images conditions.</p>
<p>» FTP(Buffered)</p>	<p>Configuration of ftp service conditions to send pre-post alarm images.</p>
<p>» Alarm Buffering</p>	<p>Configuration to freeze pre-post alarm buffering mechanism, which is used with application software to pull buffered images at FlexWATCH™ server's pre-post buffers. It is also possible to preview the alarm buffered images using web browser.</p>

6. Recording Configuration [FW-5450 Only]

Only when you install a HDD into FlexWATCH® 5450, you can record & search images. Recording configuration menu won't be available if FW5450 is without a HDD. You can do HDD format, HDD information check, motion & event condition setup for recording, etc.

6.1. HDD Configuration

You can do HDD format and HDD information check in this menu.

6.1.1. HDD Format

1. Please turn off FW-5450.

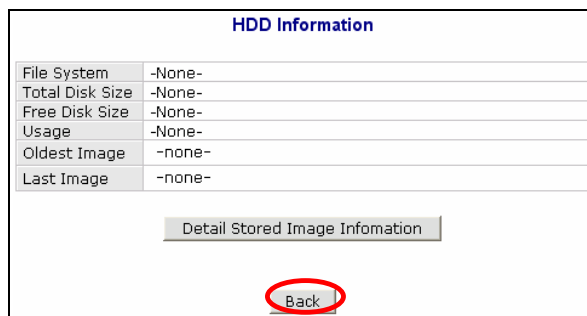


When you install a HDD (Hard Disk Drive), please turn off the FW5450. Otherwise, the HDD might have a problem.

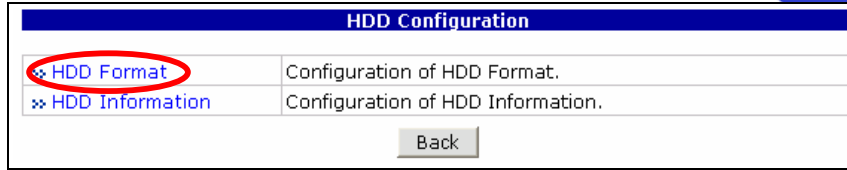
2. Install a HDD and turn on the FW-5450.
3. Please access to the web page of FW-5450 and go to "Admin" menu. Click "Recording Configuration".



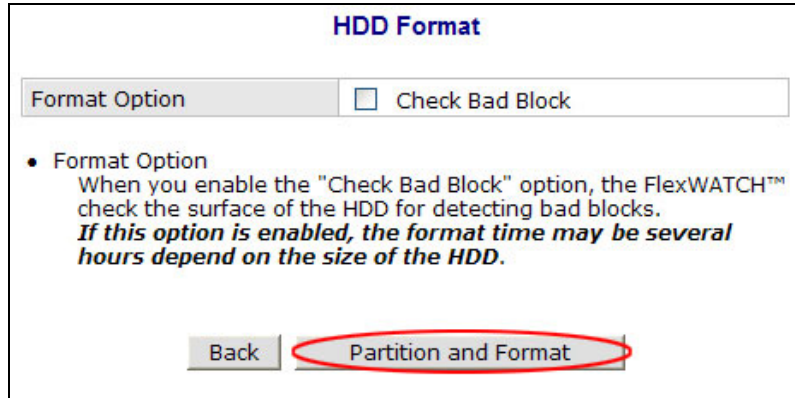
4. Please check current format status of the HDD by Clicking "HDD Information".



5. If HDD Information has "-None-", it hasn't been formatted yet. Thus, please click "Back" and click "HDD Format".



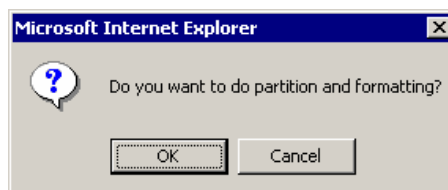
- When you enable the “check Bad Block” option, the FlexWATCH will check the surface of the HDD for detecting bad blocks. This format takes longer format time and may be several hours depending on the size of HDD.



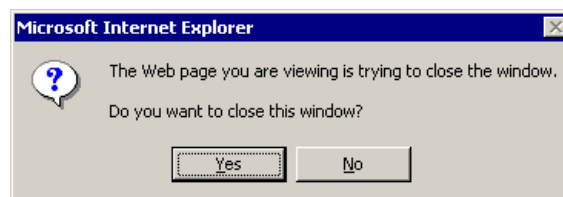
Format times are as follows:

- 80G HDD : about 3 minutes
- 120G HDD: about 5 minutes
- 160G HDD: about 7 minutes
- 250G HDD: about 10 minutes

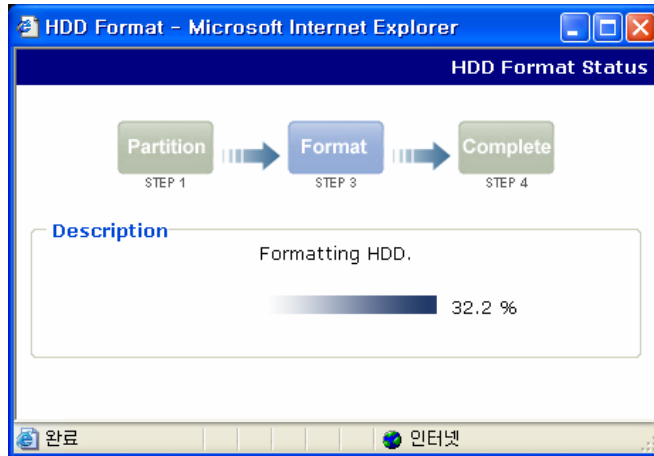
- When you click “Partition and Format” button, you will see a pop-up window as below. If you want to format the HDD, please click OK. Otherwise, click Cancel.



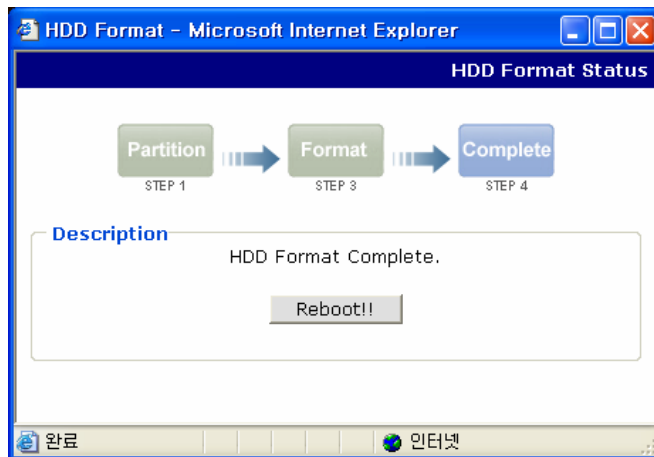
- If you click OK, you will see the below pop-up window. Please click “Yes” to close the webpage.



- After closing webpage, you can check the status of HDD format as below image.



During HDD format, if FW-5450 is shut down abnormally. HDD would be damaged. After completion of HDD format, please click "Reboot" button.



10. After rebooting, please check the current HDD status in HDD information menu as below.

HDD Information	
File System	Default format
Total Disk Size	230.09 Gb
Free Disk Size	218.37 Gb
Usage	5.094 %
Oldest Image	-none-
Last Image	-none-

6.2. Recording Configuration

You can configure recording conditions for each camera such as motion detection recording, 24 hours recording, schedule recording, event recording, etc. If you have cameras registered by “RX Module Registration”, you can also record images from those cameras.

6.2.1. Recording Configuration

When you click “Recording Configuration”, you can see available server list for recording. For example, if FW5450 has 2 FW3450s registered to “RX Module Registration”, VS Module ID shows you 3 servers in the list. Therefore, FW-5450 can record not only its 4 cameras but also other remote cameras attached the other FlexWATCH Server registered to FW-5450. Below is the example of motion detection recording setting.

1. Click “Recording Configuration” in Recording Configuration menu.



2. This menu shows you the list of VS Module ID, Server name, Connection Type, server IP address, and MAC address. You can configure each camera of VS modules. Below is the case that you select “Server Module 0” and select cameras connected to FW-5450 for recording configuration.



3. “Server Module 0” refers to FW-5450 itself. Thus it shows you 4 cameras which can be configured. You can configure each camera by selecting it. If you want to configure the Camera 1, then Click “Camera 1”.

Server Module 0 Recording Configuration

Camera Number	Camera Name
Camera 1	- cam 1 -
Camera 2	- cam 2 -
Camera 3	- cam 3 -
Camera 4	- cam 4 -

4. After Selecting “Camera 1”, you will see below configuration screen and you can set recording speed, camera name, etc. After changing the setting values, please click “Save” button.

Recording Configuration

Recording Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Server Module ID	0
Server Module Name	
Camera Number	1
Camera Name	- cam 1 -
Pre-Recording Speed	5.0f/s
Pre-Alarm Count	0
Post-Recording Speed	5.0f/s
Post-Alarm Count	0

Name	Description
Recording Service	If you want to record, please click “Enable”. Otherwise, click “Disable”.
Server Module ID	RX Module ID
Camera Number	Camera number
Camera Name	You can enter camera name with up to 31 alpha-numeric letter or 15 Unicode letters.
Pre-Recording Speed	Recording speed before the event occurs
Pre-Alarm Count	When Event Recording, up to 5 frames right before the event can be recorded.
Post-Recording Speed	Recording speed after the event occurs
Post-Alarm Count	When Event Recording, up to 5 frames right after the event can be recorded.

5. Below menu is for other recording conditions. Up to 4 conditions can be applied to each camera. For example, if you set Condition 1 & 2, FW-5450 will record when Condition 1 or Condition 2 is satisfied.

Please click below link to configure the recording configuration.

❖ Condition 1	[Not Used]
❖ Condition 2	[Not Used]
❖ Condition 3	[Not Used]
❖ Condition 4	[Not Used]

6. You can configure the recording conditions for each camera.

EX) Select Mode: Schedule and Event

Schedule: Tue.

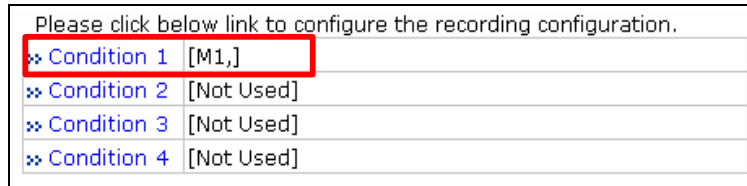
Event: Motion Detection on CH 1

Condition 1: When motion is detected in CH1 on every Tuesday, FW-5450 will do recording.

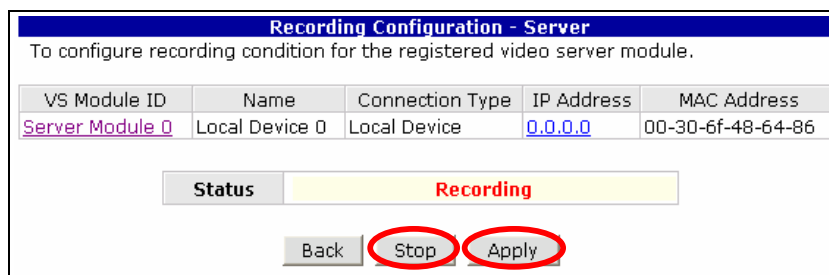
The screenshot shows the 'Condition 1' configuration window. At the top, it is titled 'Condition 1'. Below the title, there are fields for 'Service' (Recording), 'Module ID' (0), and 'Camera ID' (1). There are two radio buttons: 'Enable' (selected and circled in red) and 'Disable'. Under 'Select Mode', there are four radio buttons: 'Always', 'Schedule Only', 'Event Only' (selected), and 'Schedule and Event'. The 'Schedule' section has a 'Week' row with checkboxes for Sun, Mon, Tue, Wed, Thu, Fri, Sat. Below this are fields for 'Time (hh:mm)' and 'Date (mm/dd)'. The 'Event' section has a row of checkboxes numbered 1 to 6. Under this row, there are four rows of checkboxes: 'Alarm Sensor', 'Motion Detection' (with a checkmark in column 1), 'Camera Connected', and 'Camera Disconnected'. At the bottom, there are 'Back' and 'Save' buttons, with 'Save' circled in red.

Menu	Options	Description
Select Mode	Always	24hours 365days recording
	Schedule Only	Recording by Date, Time or Day
	Event Only	Recording by Events such as Alarm, Motion, and Camera Disconnection.
	Schedule and Event	Recording by Schedule and Events
Schedule	Week	You can set from Sunday to Saturday
	Time	You can set Time
	Date	You can set Date
Event	Alarm Sensor	Recording by Alarm sensor from DI
	Motion Detection	1,2,3,4 refer to Camera number. If 1 is checked, when motion is detected in CH1, FW-5450 will record images. For example, if all 1,2,3,4 are checked, then when all of Ch1, Ch2, Ch3, and Ch4 have detected motions, FW-5450 will record images from Camera 1 in the above case.
	Camera Connected	When Camera is physically connected to FW-5450, it will record.
	Camera Disconnected	When Camera is physically disconnected to FW-5450, or power of Camera is off, it will record.

7. After recording condition settings, please click “Save” and click “Back” to go back to the previous page to check the status of Condition 1 as following image.



8. After completion of all of recording configuration, Please click “Record” button to start recording. Click “Apply” button to put new setting values into Flash memory.



When you click Record button, the record button becomes Stop button. If you want to stop Recording, you can click Stop button.

6.3. View Recording Profile

You can see all the setting values that you have set for all the cameras in a pop-up window.

1. Click View Recording Profile.



2. Then you will see a pop-up window.

Recording Profile																														
Server	Camera	Status	Start Date		End Date		Start Time		End Time		Week							Alarm Sensor						Motion Detection						
			Month	Day	Month	Day	Hour	Min	Hour	Min	Sun	Mon	Tue	Wed	Thu	Fri	Sat	1	2	3	4	5	6	1	2	3	4	5	6	
Local Device 0 Unknown (10.10.225.56)	Cam 1 - cam 1 -	<input checked="" type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	[Cam 2]	<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	[Cam 3]	<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cam 4 - cam 4 -	<input checked="" type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	XX	XX	XX	XX	XX	XX	XX	XX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

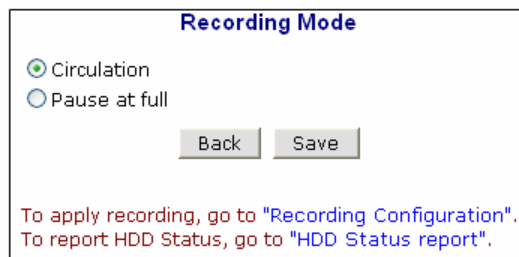
6.4. Recording Mode

You can select either Circulation mode or Pause at full mode.

1. Click Recording Mode in Recording Configuration menu.



2. You will see below menu. If you want to keep recording when HDD is full, you can select Circulation mode. FW-5450 will continuously be recording from the beginning of the HDD. If you select "Pause at full" mode, when HDD is full, FW-5450 will stop recording. After recording mode selection, please click "Save". To apply recording, go to "Recording Configuration" menu.



Circulation	Each recorded file is 630Mbytes. When HDD is full, the oldest file of 630Mbytes will be deleted.
Pause at full	When HDD is full, Recording status will become STOP. You can receive email notification by HDD Status Report function.

6.5. HDD Status report

HDD status can be sent to user defined e-mail accounts so that user can get HDD status from the server. Disk full and Periodic status information can be sent to user’s e-mail account.

1. Click “HDD Status Report” in Recording Configuration menu.



2. Please enable the services you want. You can choose Day & Time for Periodic Notification.

HDD Status Report							
Disk Full Notification	<input checked="" type="radio"/> Enable <input type="radio"/> Disable						
Periodic Notification	<input checked="" type="radio"/> Enable <input type="radio"/> Disable						
Day	SUN	MON	TUE	WED	THU	FRI	SAT
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time (hh:mm)	15	:	00				
HDD Error Notification	<input checked="" type="radio"/> Enable <input type="radio"/> Disable						
HDD Error Beep Sound	<input checked="" type="radio"/> Enable <input type="radio"/> Disable						

Disk Full Notification	When HDD is full, you will get an email notification.
Periodic Notification	You will get a periodic report of HDD status based on schedule.
Day & Time	You can choose Day & Time for periodic Notification. In the above setting, you will get a report on every Monday & Wednesday 3 P.M.
HDD Error Notification	When HDD error occurs, you will get an email notification.
HDD Error Beep Sound	When HDD error occurs, you will hear Beep sound by enabling.

3. Please write all the necessary information of your email services such as SMTP server, ID&PW, etc.

SMTP Server	<input type="text" value="kornet.net"/>
Authentication Login	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
User ID	<input type="text" value="abcd"/>
Password	<input type="password" value="*****"/>
Sender	<input type="text" value="dhhong@seyeon.co.kr"/>
1st Recipient	<input type="text" value="seyeon@hanmail.net"/>
2nd Recipient	<input type="text" value="flexwatch@shinbiro.com"/>
3rd Recipient	<input type="text" value="fw5440@hotmail.com"/>
----- User-Defined Message -----	
<input type="text" value="It is necessary to disk space confirmation."/>	
<input type="text"/>	
<input type="text"/>	
<input type="text"/>	
<input type="button" value="Back"/> <input type="button" value="Save"/>	

SMTP Server	SMTP Server address
Authentication Login	Select whether you use Authentication login or not
User ID	User ID for Authentication Login
Password	User Password for Authentication Login
Sender	Sender's E-mail address
1st Recipient	Recipients' E-mail addresses (Max. 3 Recipients)
2nd Recipient	
3rd Recipient	
User Defined Message	User defined message attached to E-mail

6.6. Clear Recording Config

This function will initialize the Recording setting values in Recording configuration menu for FW-5450.

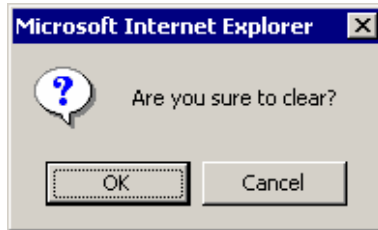
1. Click "Clear Recording Config" in Recording Configuration menu.



2. If you click Clear button, you will be asked once again to make sure.



3. If you click OK, the Recording setting values will be cleared.



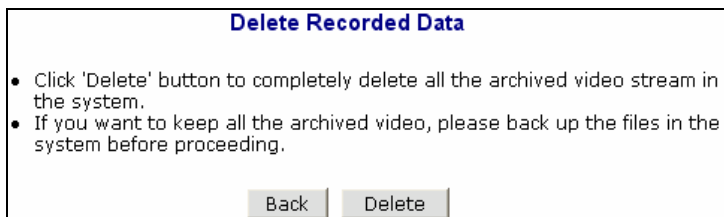
6.7. Delete Recorded Data

This function is to totally delete all the recorded data in HDD.

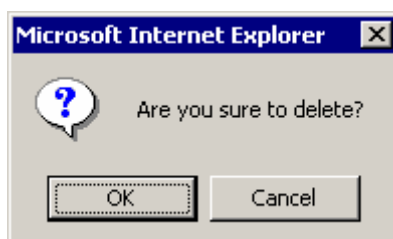
1. Click "Delete Recorded Data" in Recording Configuration menu.



2. Click "Delete" button to delete all the data in HDD.



3. You will be asked once again to make sure that you really want to delete all data. If you click "OK", FW-5450 will delete all data in HDD.



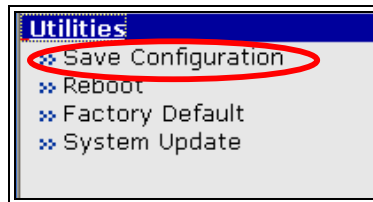
7. Utilities

Flash memory update, rebooting, factory default, system upgrade, etc.

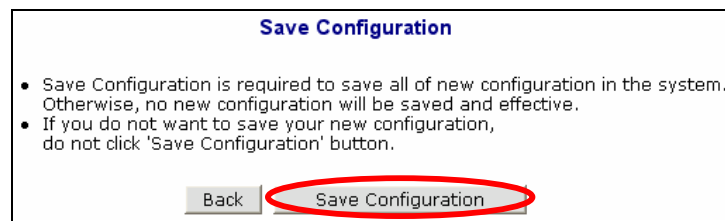
7.1. Save Configuration

This function saves current all settings into Flash Memory. It is highly recommended that you do Save Configuration if you configure something in FlexWATCH® Server.

1. Click "Save Configuration" in Utilities group.



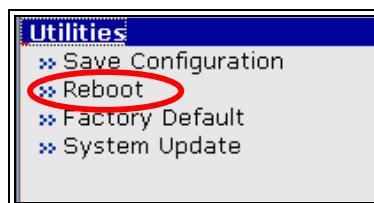
2. Click "Save Configuration" button to save current setting values. Otherwise, click Back button.



7.2. Reboot

It reboots the FlexWATCH server. It is recommended that you reboot the system, if you configure something and do Save Configuration.

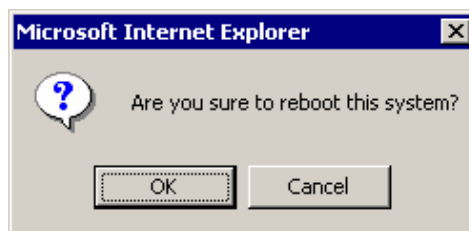
1. Click Reboot in Utilities group.



2. Click Reboot button.



3. You will be asked once again to make sure that you really want to reboot the system. If you click “OK”, FlexWATCH server will be rebooted.

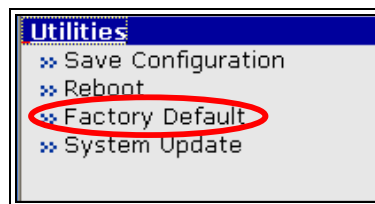


4. After confirmation, It will ask you whether you want to close the web browser or not. You won't be able to access to webpage of FlexWATCH server Until rebooting is completed,

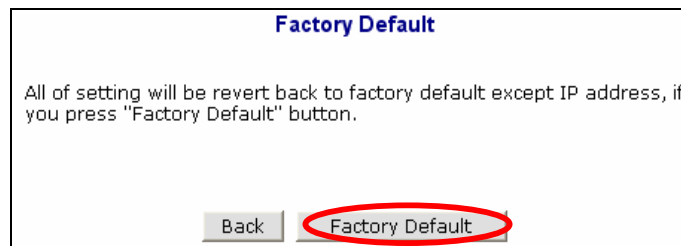
7.3. Factory Default

This function will revert to factory default for FlexWATCH® server except for network related values.

1. Click “Factory Default” in Utilities group.



2. Click Factory Default button.



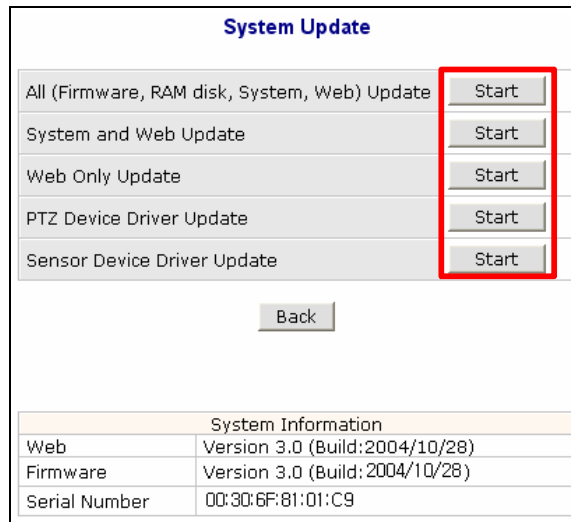
3. You will be asked once again to make sure. If you click “OK” the factory default values will be restored.



7.4. System Update

Here you can update internal program and data for FlexWATCH® Server. Internal program and data of FlexWATCH® Server is saved in Flash Memory. It consists of 4 files including Kernel Image, Ram disk Image, System Image, and Web Image.

You should have 4 separate firmware files in your PC so that you can update your FlexWATCH server with them.



1. All (Firmware, RAM disk, System, Web) Update: You can update all 4 firmware files (Firmware, RAM Disk, System, and Web).
2. System and Web Update: You can update System and Web.
3. Web Only Update: when you want to update Web only.
4. File name reference for FlexWATCH server.

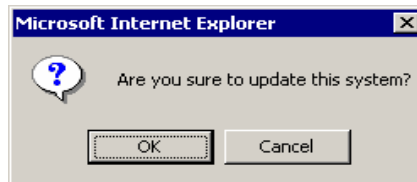
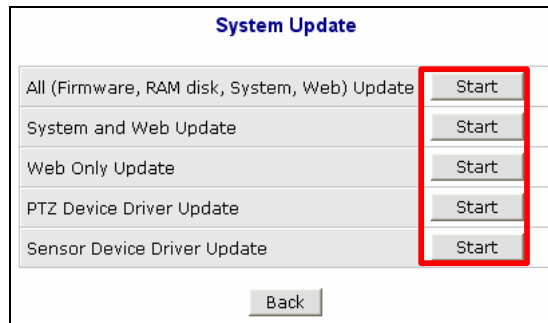
Kernel Image	a_ker_mx [FW-3450 & FW-1130 & FW-3150] a_ker_ms [FW-5450]
RAM Disk Image	a_rfs_x4.gz [FW-3450 & FW-5450] a_rfs_x1.gz [FW-1130 & FW-3150]
System Image	a_sys_m4.tar.gz {FW-3450 & FW-5450} a_sys_m1.tar.gz [FW-1130 & FW-3150]
Web page Image	a_web_xx.tar.gz

- ✓ You can download the latest version of firmware files in download menu of Seyeon Tech Website (www.flexwatch.co.kr, www.seyeon.co.kr).

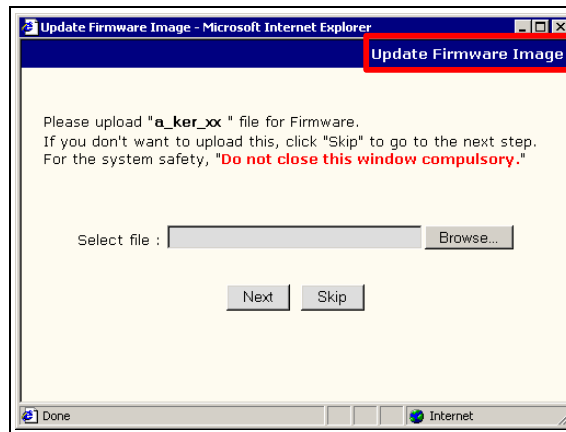
5. Reboot the system after Update is finished.


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

1. When you click Start button in All (Firmware, RAM disk, System, Web) Update, you will be asked if you want to keep Update.

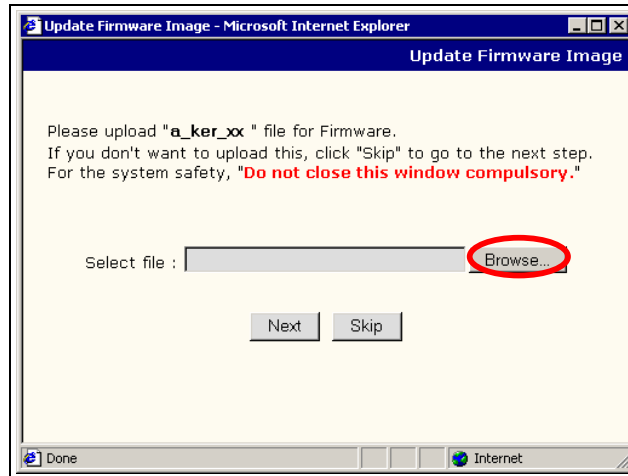


2. You will get a pop-up window where you need to select the firmware image file located in your PC.

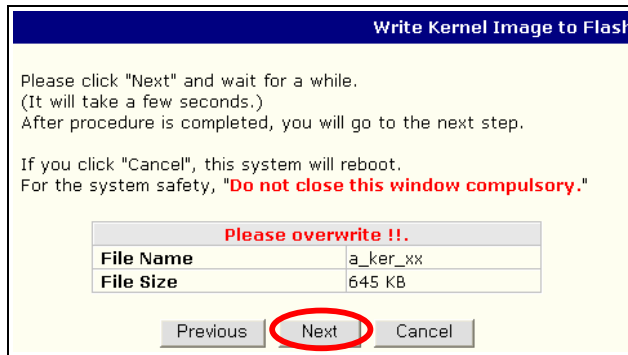


 *If user's PC has pop-up block function, above window may not be popped up. Thus, please do not use pop-up block function when you do system update in Web page.*

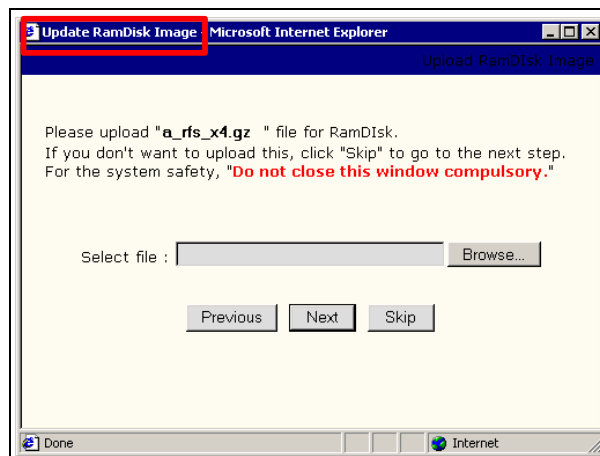
3. By Clicking "Browse" button, you can find the firmware image file in your PC.



4. To update with selected file, please click “Next” button. Otherwise, click “Skip” to skip the current file update.
5. If you click “Next” button, you can check File Name & File Size.



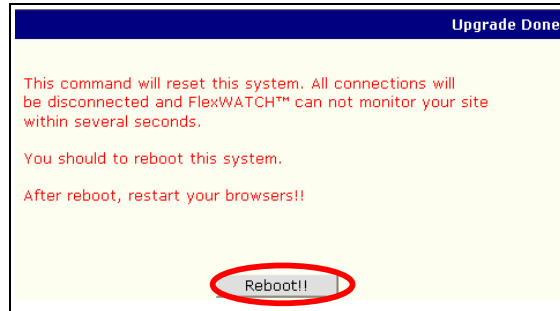
6. If you click “Previous”, you can go to step 2. If you click “Next”, then new firmware will be uploaded to FlexWATCH server. “Cancel” button will stop the Update procedure.
7. Next stage, you can update RAM Disk Image.



8. The update procedure is the same as step 2~step 5.
9. Next Stage will be update of System Image & Web page. This update procedure is also same

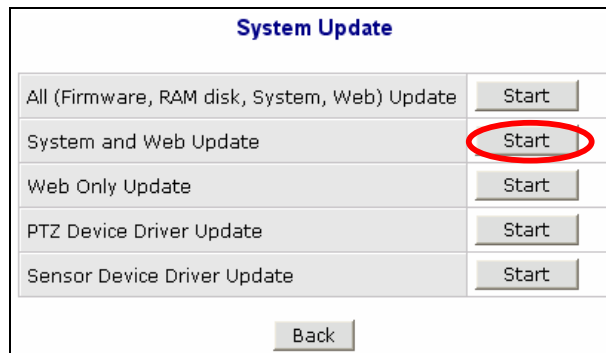
as step 2~step

10. After all update procedure is done, you will see a “Reboot” window. Please click Reboot button to reboot the system.



7.4.2. System and Web Update

1. When you click Start button in System and Web Update, you will be asked if you want to keep Update.



2. The rest of update procedure is the same as All Update procedure.
3. After all update procedure is done, Please click Reboot button to reboot the system.

7.4.3. Web Only Update

1. When you click Start button in Web Only Update, you will be asked if you want to keep Update.

System Update	
All (Firmware, RAM disk, System, Web) Update	<input type="button" value="Start"/>
System and Web Update	<input type="button" value="Start"/>
Web Only Update	<input type="button" value="Start"/>
PTZ Device Driver Update	<input type="button" value="Start"/>
Sensor Device Driver Update	<input type="button" value="Start"/>

2. The rest of update procedure is the same as All Update procedure.