

iStreamer IPTV Gateway Server

User's Manual



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Chapter 1 Product Outline

1.1 Outline

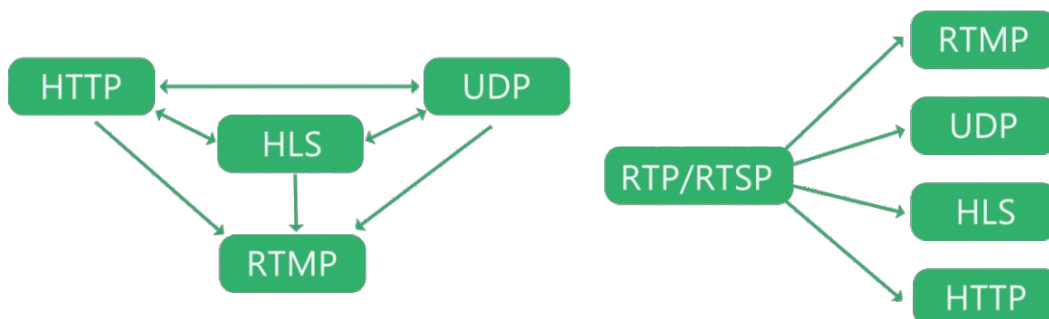
iStreamer is a powerful, yet low power consumption IPTV Gateway Server which combined with IP Gateway and IPTV server in one unit.

It can convert the broadcast network IP stream over HTTP, UDP, RTP, RTSP and HLS and TS file into HTTP, UDP, HLS and RTMP protocol. The platform can integrate IPTV system and users can upload VOD source on it with huge memory. used for the protocol conversion scenarios and streaming media distribution scenarios, this full function device makes it ideal for small CATV head end system, especial in hotel TV system.

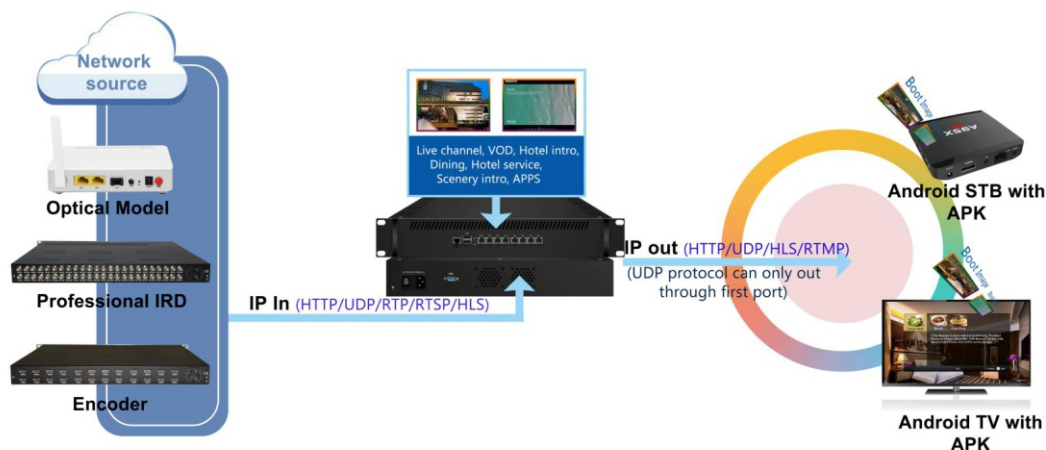
1.2 Features

1. IPTV Gateway + IPTV server in one device
2. Manage gateway and IPTV server separately
3. HTTP, UDP, RTP, RTSP and HLS in→HTTP, UDP, HLS and RTMP out
4. Adding scrolling caption, welcome words, pictures, advertisement, video, music in main interface
5. IPTV Functions: Live channel, VOD, Hotel intro, Dining, Hotel service, Scenery intro, APPS...
6. IP anti-jitter function
7. TS files uploading through Web management
8. Downloading DIBSYS IPTV APK directly from this device
9. Support program playing with APK downloaded android STB and TV

1.3 IP Protocol Conversion



1.4 General Principle Chart



1.5 Specification s

Input

CH1 ~ CH7(1000M)

IP input over HTTP, UDP(SPTS), RTP(SPTS), RTSP (over UDP, payload: mpeg TS) and HLS TS files uploading through Web management

IP Output

Data port (1000M)

DATA CH 1-7(1000M) ports

over HTTP (Unicast), UDP(SPTS, Multicast), HLS and RTMP (Program source should be H.264 and AAC encoding)
IP out over HTTP/HLS/RTMP (Unicast)

SYSTEM

	iStreamer-S	iStreamer	iStreamer-I
Memory	4G	4G	8G
CPU	1037	I7	I7
Solid-State Disk(SSD)	120G	120G	120G
Mechanical Hard Disk	4T	4T	4T

Channel switching time

IPTV System Function

IPTV system main interface

Management

maximum 80 HD/SD programs

HTTP/RTP/RTSP/HLS is converted into UDP (Multicast), the actual application shall prevail, and suggest maximum 80% CPU utilization

HTTP (1-3s), HLS (0.4-0.7s)

Live channel, VOD, Hotel introduction, Dining, Hotel service, APPS, scenery introduction, etc (the STB/Android TV installed DIBSYS IPTV APK scrolling caption, welcome words, pictures, advertisement, video , music, etc, (the STB/Android TV installed DIBSYS IPTV APK), Play program with APK downloaded android STB and TV

web-based NMS

Bitrate 2Mbps each programs

Environment

Power Supply

Dimension

Operating temperature

Storage temperature

Humidity

AC 100V±10%, 50/60Hz or AC 220V±10%, 50/60Hz

482.6mm×328mm×88mm (W*L*H)

0 ~45℃

-20 ~ 80℃

10 ~ 90% non-condensed

Test data for reference

Protocol conversion	Programs	Bitrate	iStreamer-S	iStreamer-M	iStreamer-I	CPU utilization
HTTP/RTP/RTSP/HLS to UDP	80	2M	---	---	---	55%
HTTP to HTTP	30	2M	150	300	600	80%
	50	2M	80	160	320	80%
HTTP to HLS	50	2M	200	400	800	46%
UDP to HLS	50	2M	200	400	800	50%
	80	2M	150	300	600	72%
UDP to HTTP	50	2M	120	240	480	50%

1.6 Appearance and Description

Front Panel Illustration:



1/2	Reserved ports for future
3	Data port for IP output and Network management
4	CH1~CH7: IP input / Unicast output ports
5	Grounding Pole/ Power Switch and socket
6	VGA port for connecting displayer

Chapter 2 Installation Guide

2.1 Acquisition Check

When users open the package of the device, it is necessary to check items according to packing list. Normally it should include the following items:

iStreamer IPTV Gateway Server

User's Manual

Grounding Cable

Power Cord

If any item is missing or mismatching with the list above, please contact local dealer.

2.2 Installation Preparation

When users install device, please follow the below steps. The details of installation will be described at the rest part of this chapter. Users can also refer rear panel chart during the installation.

The main content of this chapter including:

Checking the possible device missing or damage during the transportation

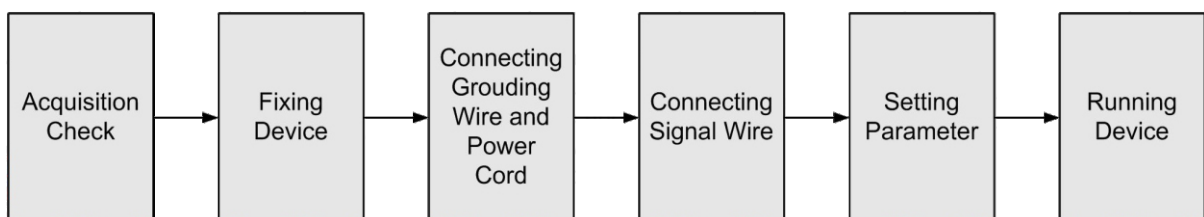
Preparing relevant environment for installation

Installing gateway

Connecting signal cables

Connecting communication port (if it is necessary)

2.2.1 Device's Installation Flow Chart Illustrated as following:



2.2.2 Environment Requirement

Item	Requirement
Machine Hall Space	When user installs machine frame array in one machine hall, the distance between 2 rows of machine frames should be 1.2~1.5m and the distance against wall should be no less than 0.8m.
Machine Hall Floor	Electric Isolation, Dust Free Volume resistivity of ground anti-static material: $1 \times 10^7 \sim 1 \times 10^{10}$, Grounding current limiting resistance: 1M (Floor bearing should be greater than 450Kg/m ²)
Environment Temperature	5~40°C(sustainable), 0~45°C(short time), installing air-conditioning is recommended
Relative Temperature	20%~80% sustainable 10%~90% short time
Pressure	86~105KPa
Door & Window	Installing rubber strip for sealing door-gaps and dual level glasses for window
Wall	It can be covered with wallpaper, or brightness less paint.
Fire Protection	Fire alarm system and extinguisher
Power	Requiring device power, air-conditioning power and lighting power are independent to each other. Device power requires AC power 100V-240V 50/60Hz 2A. Please carefully check before running.

2.2.3 Grounding Requirement

All function modules' good grounding designs are the basis of reliability and stability of devices. Also, they are the most important guarantee of lightning arresting and interference rejection. Therefore, the system must follow this rule.

Coaxial cable's outer conductor and isolation layer should keep proper electric conducting with the metal housing of device.

Grounding conductor must adopt copper conductor in order to reduce high frequency impedance, and the grounding wire must be as thick and short as possible.

Users should make sure the 2 ends of grounding wire well electric conducted and be

antirust.

It is prohibited to use any other device as part of grounding electric circuit

The area of the conduction between grounding wire and device's frame should be no less than 25mm².

2.2.4 Frame Grounding

All the machine frames should be connected with protective copper strip. The grounding wire should be as short as possible and avoid circling. The area of the conduction between grounding wire and grounding strip should be no less than 25mm².

2.2.5 Device Grounding

Connecting the device's grounding rod to frame's grounding pole with copper wire.

2.3 Wire's Connection

The grounding wire conductive screw is located at the right end of rear panel, and the power switch, fuse, power supply socket is just beside ,whose order goes like this, power switch is on the left ,power supply socket is on the right and the fuse is just between them.

Connecting Power Cord

User can insert one end into power supply socket, while insert the other end to AC power.

Connecting Grounding Wire

When the device solely connects to protective ground, it should adopt independent way, say, share the same ground with other devices. When the device adopts united way, the grounding resistance should be smaller than 1Ω.

Caution:

Before connecting power cord to iStreamer IPTV Gateway Server, user should set the power switch to "OFF".

Chapter 3 WEB NMS operation

iStreamer is combined with 2 Module: IPTV Gateway and IPTV system, and users need to control and manage them separately through web NMS management.

User should ensure that the computer's IP address is different from the 2 Module's IP address; otherwise, it would cause IP conflict.

3.1 IPTV Gateway

3.1.1 Login

The default IP of this device is **192.168.200.136:3333** (3333 is IP port number which can't be changed)

Connect the PC (Personal Computer) and the device with net cable, and use ping command to confirm they are on the same network segment.

I.G. the PC IP address is 192.168.200.136, we then change the device IP to 192.168.200.xxx (xxx can be 0 to 255 except 136 to avoid IP conflict).

Use web browser to connect the device with PC by inputting this device's IP address in the browser's address bar and press Enter.

It displays the Login interface as Figure-1. Input the Username and Password (Both the default Username and Password are "admin".) and then click "Login" to start the device setting.

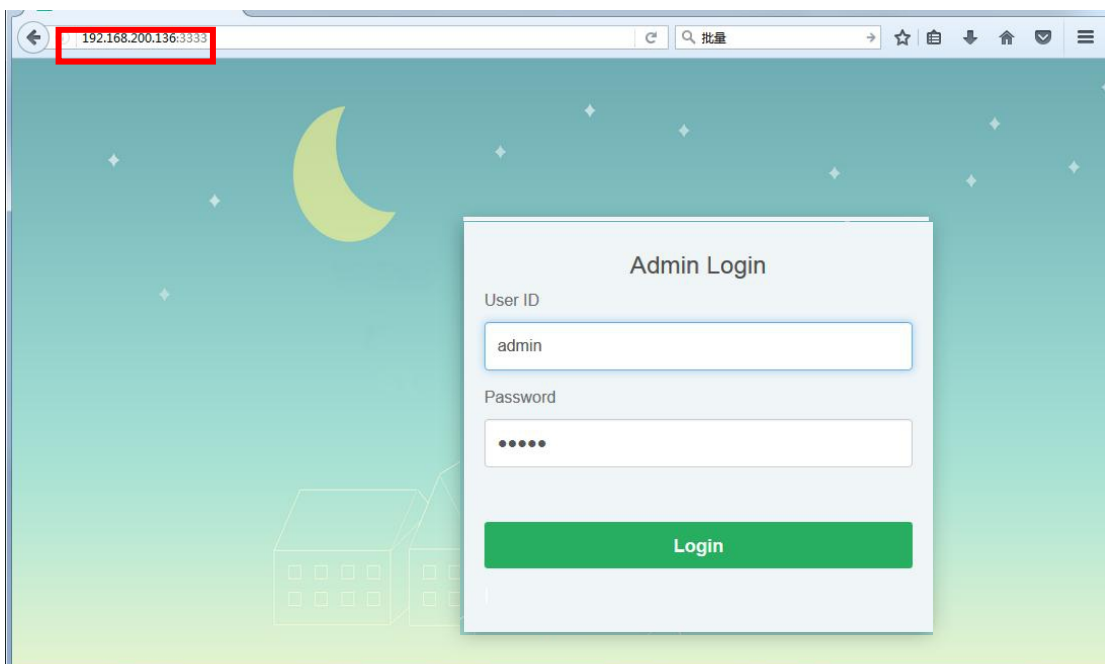


Figure-1

3.1.2 Operation

System Chart

When we confirm the login, it displays the status interface where users can have an overview of system chart. (Figure-2)

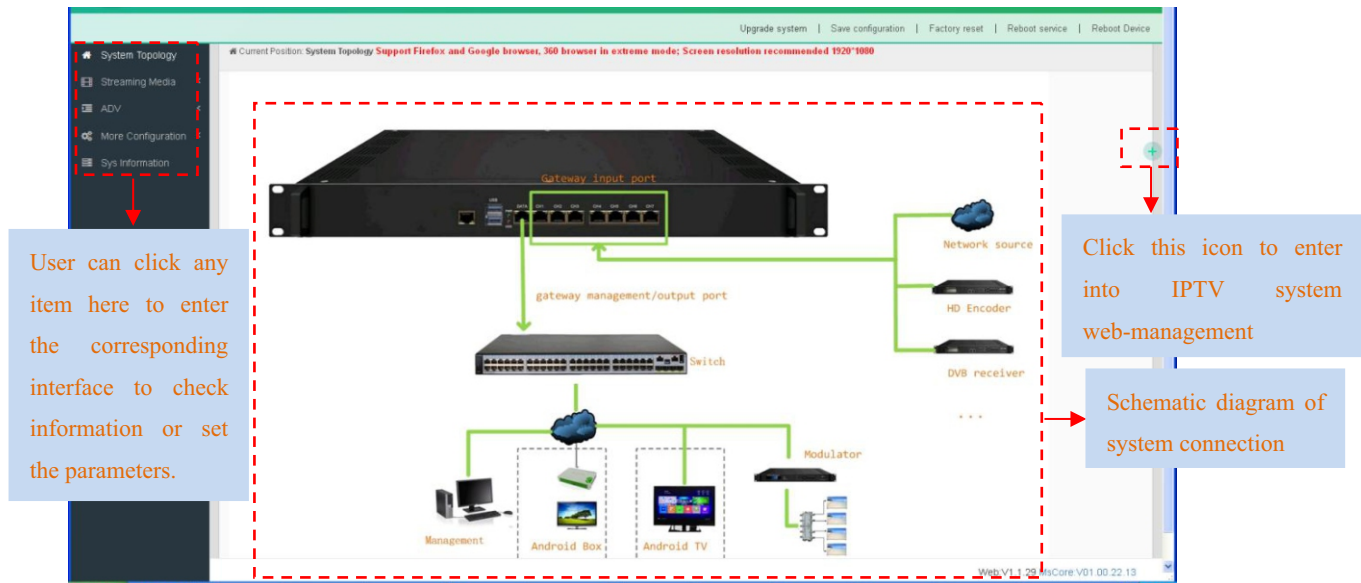


Figure-2

Streaming Media→ NIC Management

From the menu on left side of the webpage, clicking “NIC Management”, it displays the interface where users can set the dialing and NIC parameters. (If users want to use dialing function, please contact with local operators.) (Figure-3)

Number 1-8 refers to 8 data ports. Number 1 refers to the output data port. So users can't set dialing parameters.

PPPoe-[eth0]

NIC Setting-[eth0]

number	network adapter name	IP/MAC	Data	dialing status	dialing operation	NIC Setting
1	eth0 disconnected	192.168.200.136 00:90:27:E0:E3:97	↓ receive: 0/s ↑ send: 0/s			
2	eth1 disconnected	192.168.201.136 00:90:27:E0:E3:98	↓ receive: 0/s ↑ send: 0/s			
3	eth2 [100Mbps] full duplex self-adaption	192.168.202.136 00:90:27:E0:E3:99	↓ receive: 40 Kb/s ↑ send: 5416 Kb/s			
4	eth3 disconnected					
5	eth4 [1000Mbps] full duplex self-adaption					
6	eth5 disconnected					
7	eth6 disconnected	192.168.206.136 00:90:27:E0:E3:9D	↓ receive: 0/s ↑ send: 0/s			
8	eth7 [100Mbps] full duplex self-adaption	192.168.207.136 00:90:27:E0:E3:9E	↓ receive: 168 Kb/s ↑ send: 1120 b/s			

Figure-3

Streaming Media→ Custom Program

Clicking “Custom Program”, it displays the interface where users can upload TS files from local sources for distributing programs. (Figure-4)

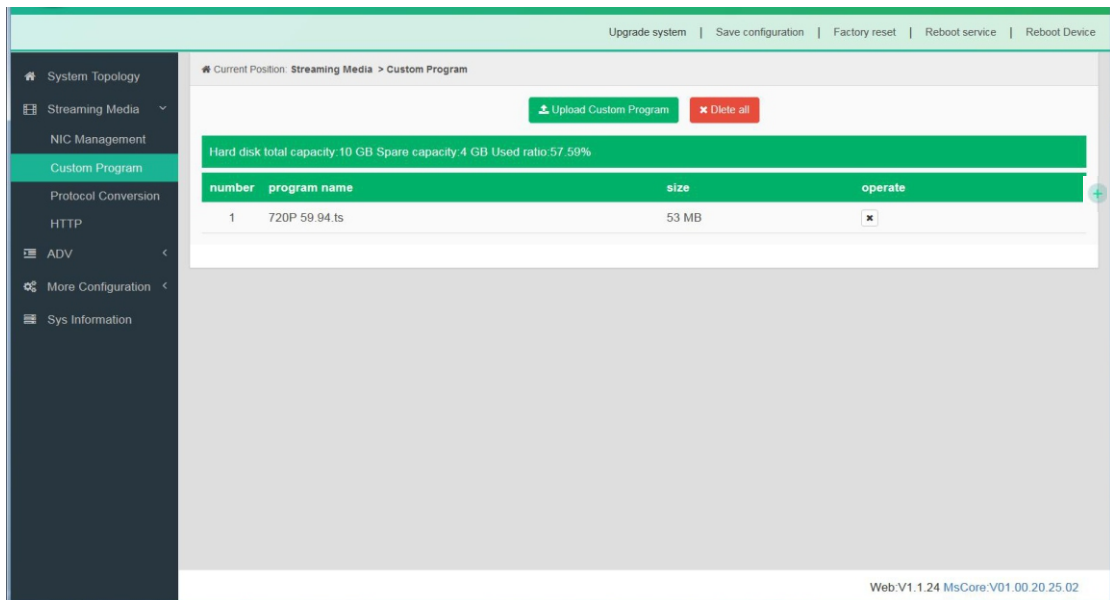


Figure-4

Streaming Media→ Protocol Conversion

Clicking “Protocol Conversion”, it displays the interface where users can set protocol conversion parameters and add programs from CH1-7. Input protocol supports HLS, HTTP, RTP, UDP, RTSP (RTP over UDP, payload MPEGTS). Output supports HLS, UDP, RTMP (RTMP is only supported when input sources are H.264 and AAC encoding.) Output address can't be changed when selecting HLS as output protocol. (Figure-5)

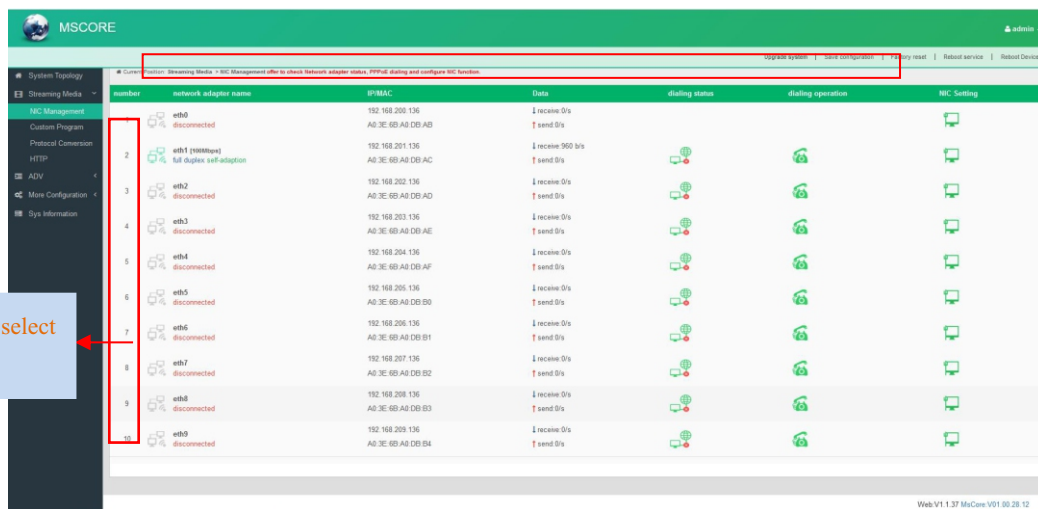


Figure-5



: Click to edit or delete programs



: Click to start/stop/stop all the program distribution

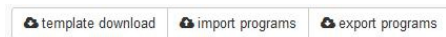


: Click box in front of program number, and then click it to batch programs information as below box. “Keep” means keep the original program information

The 'Batch Setting' dialog box contains the following fields and options:

- program type:** normal (dropdown)
- Anti-jitter:** disable (dropdown)
- input NIC:** Keep (dropdown)
- output protocol:** UDP (dropdown)

On the left, there are two checkboxes: 'disable' and 'enable' (checked), and a 'Keep' checkbox. On the right, there is a list of programs: 'normal', 'PPPoE', and 'Keep'. Below this list, there is a list of network interfaces: 'eth1', 'eth2', 'eth3', 'eth4', 'eth5', 'eth6', and 'eth7'.



: Click to download the template for inputting program information and to batch import/export programs



: Click to add programs and edit program information as below box

The 'edit program info' dialog box contains the following fields and options:

- program name:** eg.CCTV1 (text input)
- program type:** normal (dropdown)
- Anti-jitter:** disable (dropdown)
- input NIC:** eth1 (dropdown)
- output protocol:** UDP (dropdown)
- input address:** eg.rtp://239.93.0.100:5140 (text input)
- output address:** udp://224.3.3.2:10002 (text input)

On the left, there are two checkboxes: 'UDP' (checked), 'HLS', and 'RTMP'. On the right, there is a list of programs: 'normal', 'PPPoE', and 'Keep'. Below this list, there is a list of network interfaces: 'eth1', 'eth2', 'eth3', 'eth4', 'eth5', 'eth6', and 'eth7'.



: Click to batch delete programs



: Click to sort programs manually by dragging program's name

The 'program sorting' dialog box shows a grid of program numbers from 1 to 101. The grid is organized into 13 columns and 8 rows. The numbers are arranged in ascending order from left to right and top to bottom. At the bottom, there are 'Submit' and 'Cancel' buttons.

Streaming Media→ HTTP

Clicking “HTTP”, it displays the interface where users can set the HTTP parameters. HLS, HTTP and RTSP can't be converted into HTTP directly, but UDP and RTP can be converted into HTTP. The setting principle is same as “Protocol Conversion”. (Figure-6)

Note: If users want to IP out over HTTP, they need to convert HLS/HTTP/RTSP into UDP/RTP, and then converting UDP/RTP into HTTP.

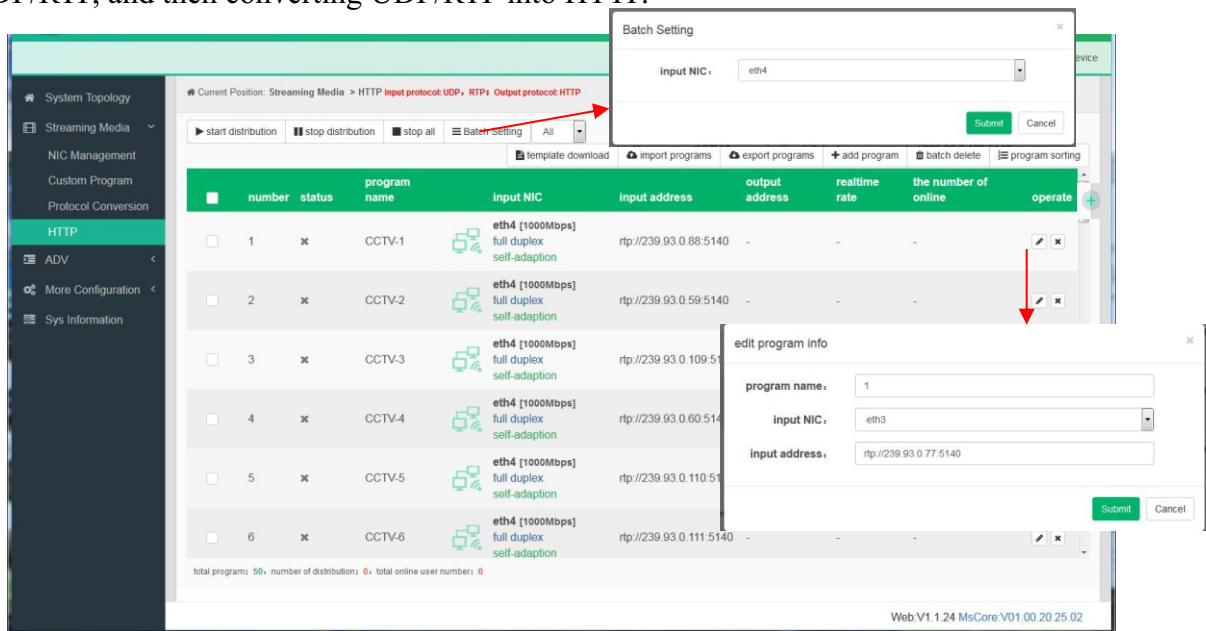


Figure-6

ADV→ Rolling Subtitles

ADV function is only applicable to IP out application and the STB and TV must be installed DIBSYS IPTV APK.

Clicking “Rolling Subtitles”, it displays the interface where users can add rolling subtitles and set subtitles' parameters. After submitting, rolling subtitles will appear when playing programs. (Figure-7)

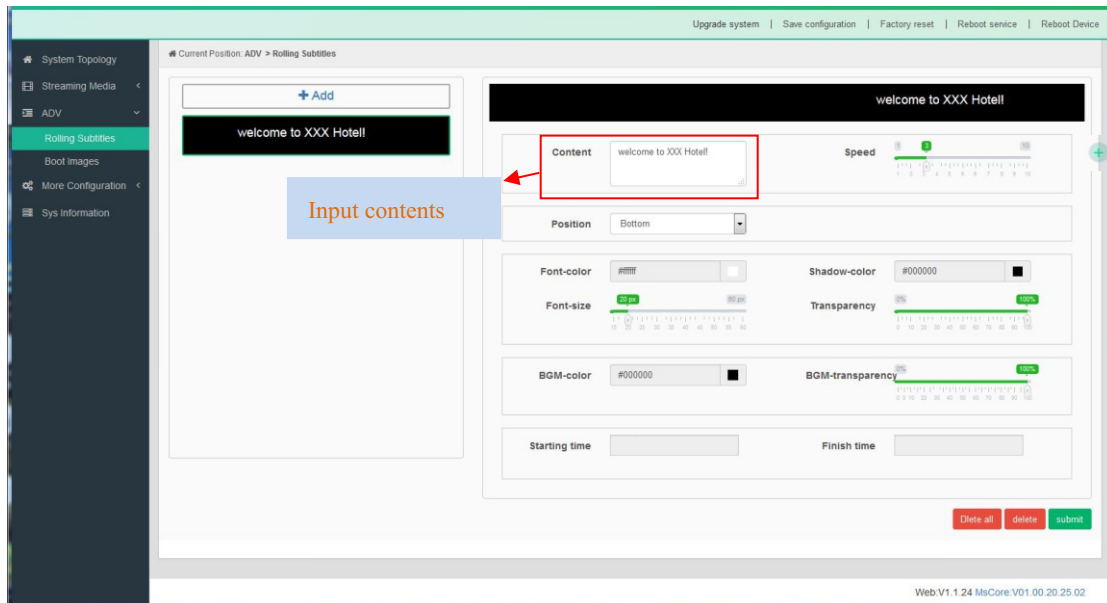


Figure-7

ADV→ Boot Images

Clicking “Boot Images”, it displays the interface where users can add boot images. Click “Add” and then upload it. After submitting, boot images will appear when starting DIBSYS IPTV APK. (Figure-8)

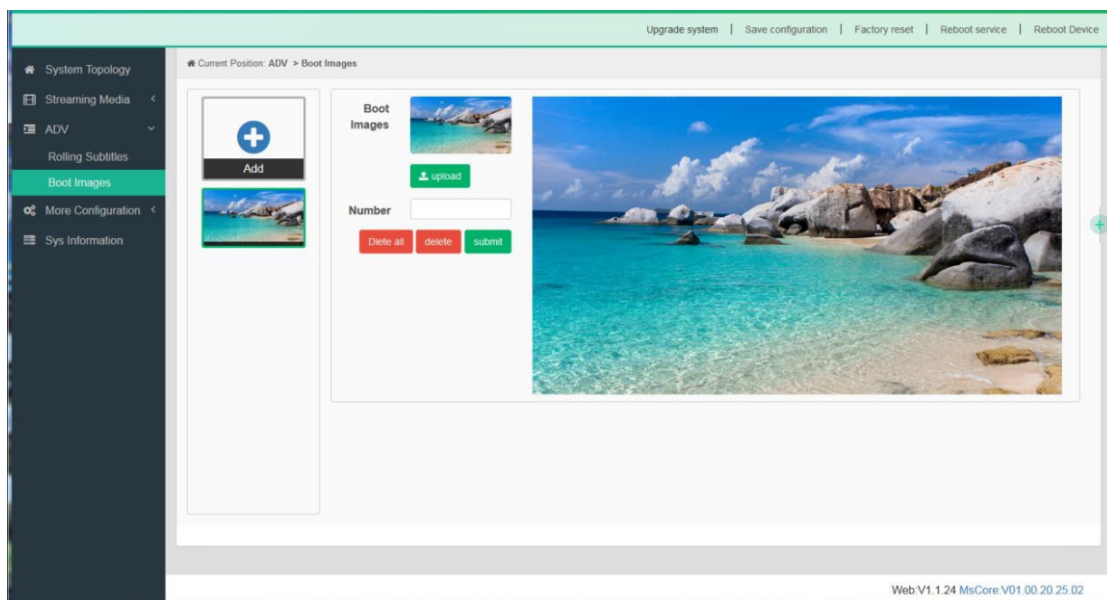


Figure-8

More Configuration→ System Set

Clicking “System Set”, it displays the interface where users can select client protocol and Unicast output port, and set ADV parameters. (Figure-9)

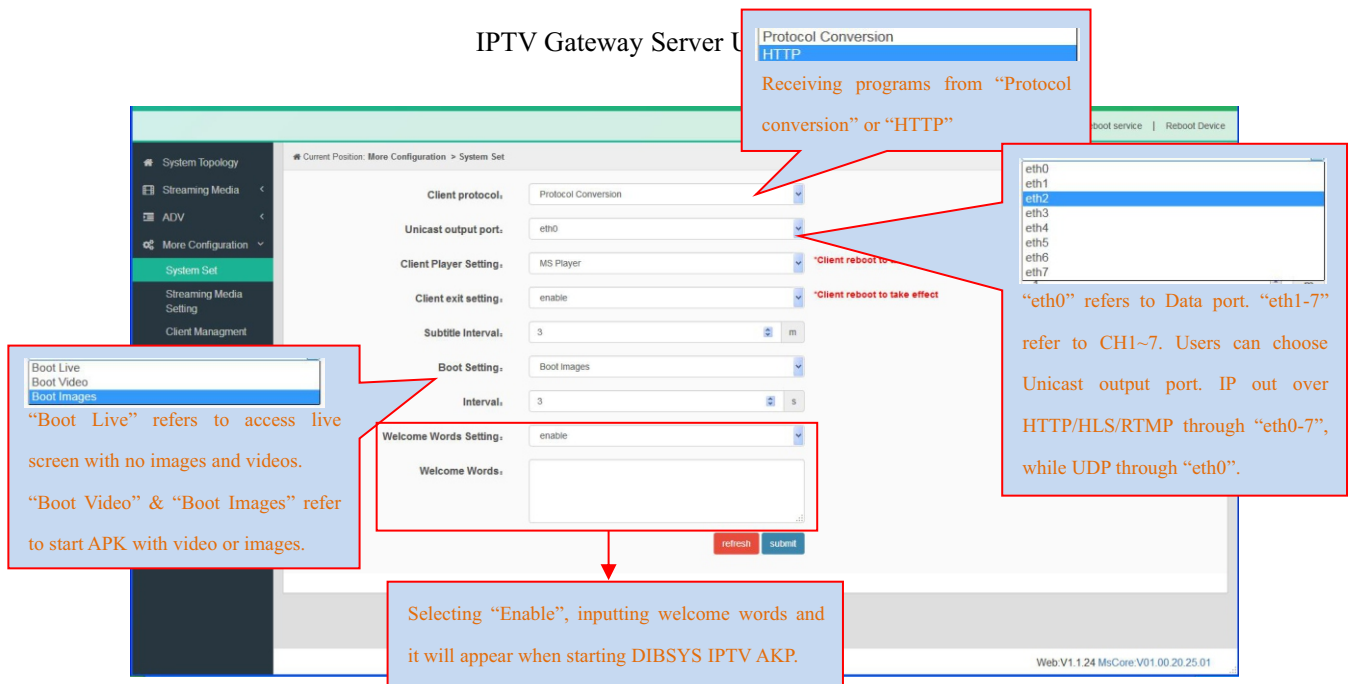
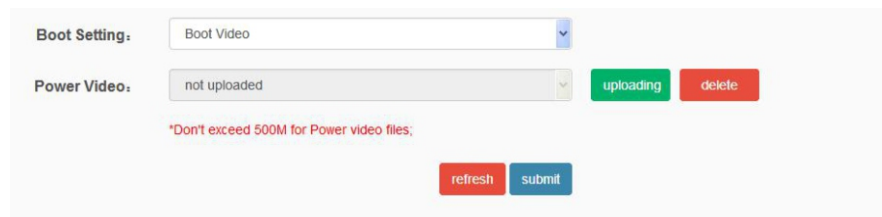


Figure-9

Select boot setting as "Boot Video" to upload boot video here and it will appear when starting DIBSYS IPTV APK. Suggest the size of video file doesn't over 500M.



More Configuration→ Streaming Media Setting

Clicking "Streaming Media Setting", it displays the interface where users can set streaming media parameters. (Figure-10)

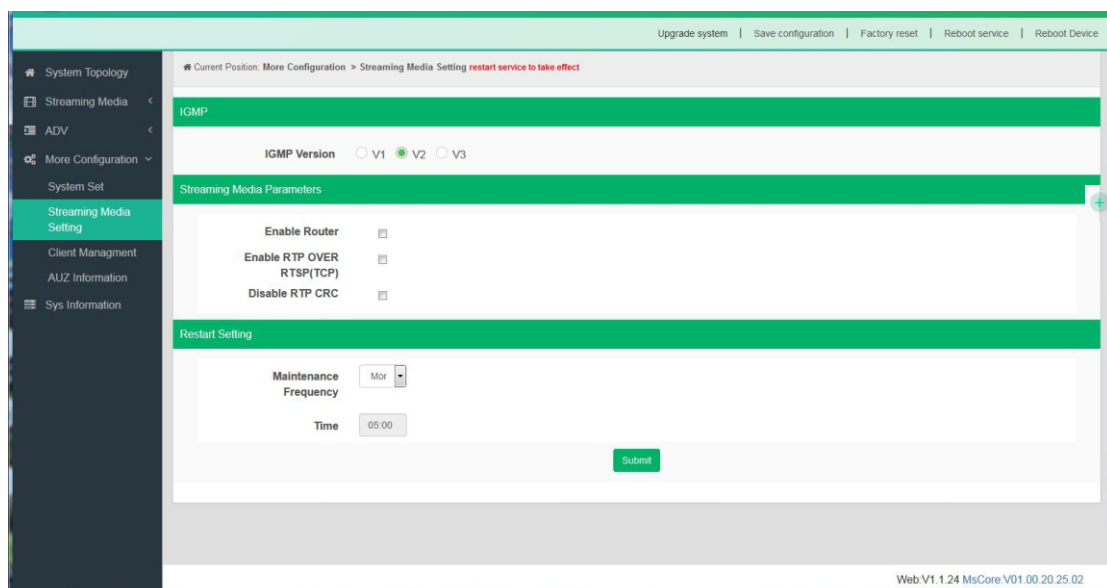


Figure-10

More→ Client Management

Clicking “Client Management”, it displays the interface where users can download APK from this device and then upload it to STB and TV. (Figure-11)

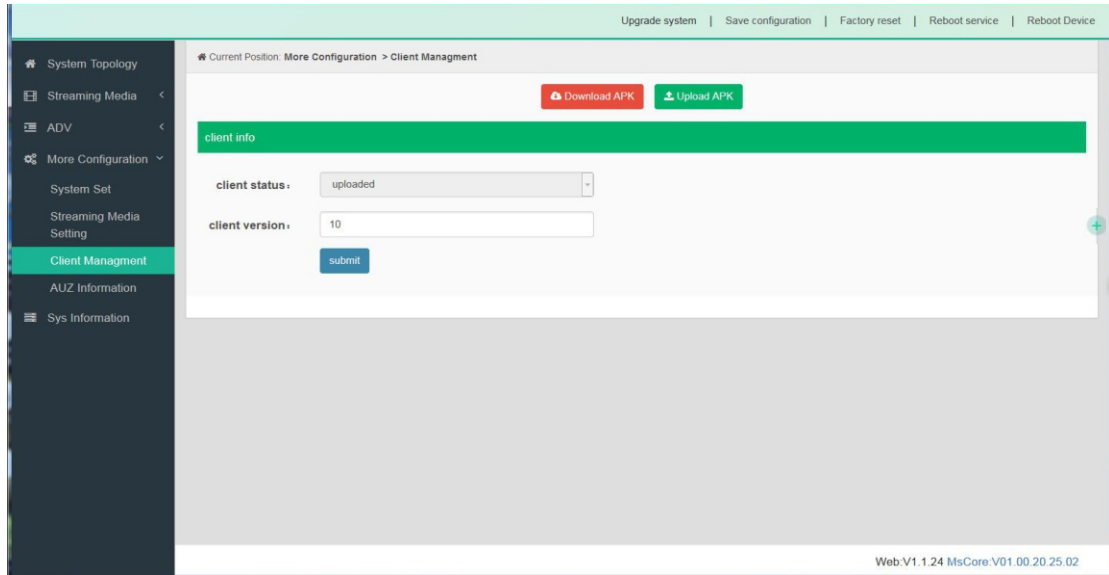


Figure-11

Clicking “Download APK”, it will trigger a box as below (select saving pass) to save IPTV APK file.



More→ AUZ Information

Clicking “AUZ Information”, it displays the interface where users can check the authorization information. (Figure-12)

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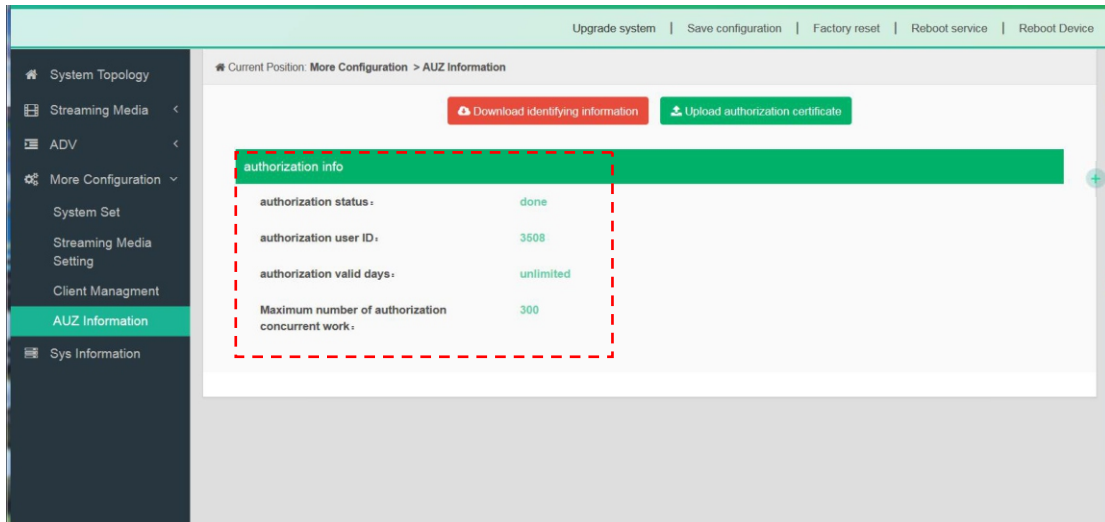


Figure-12

System Information

Clicking “System Information”, it displays the interface where users can check the system information such as CPU usage rate, CPU usage record and so on. (Figure-13)

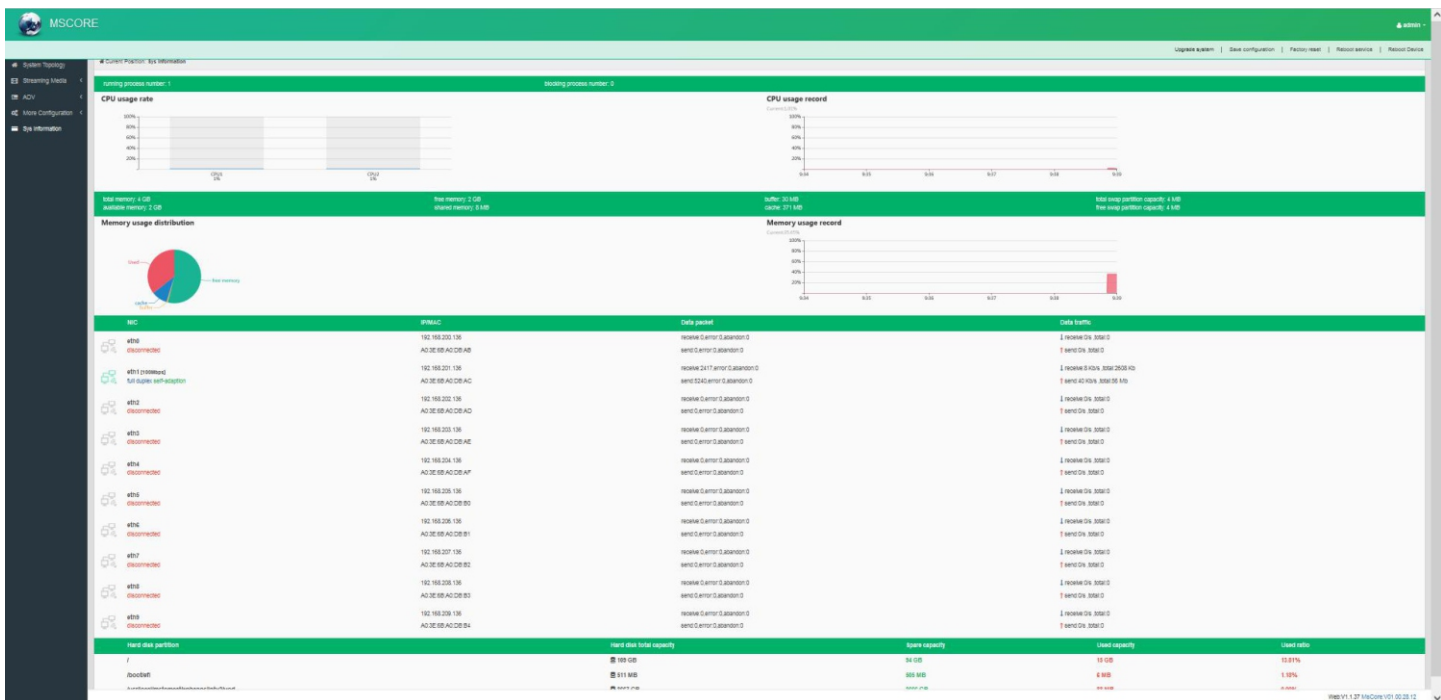
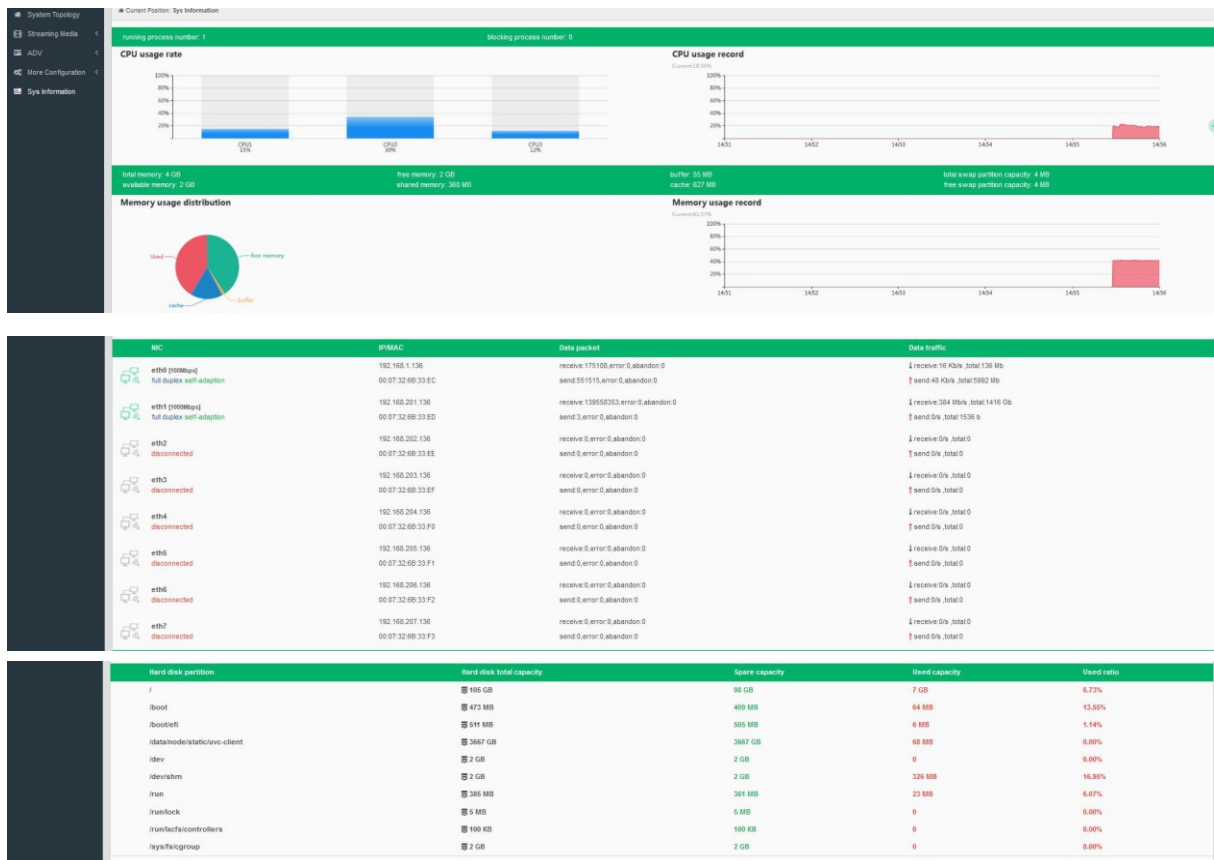


Figure-13

iStreamer-M



3.2 IPTV System (Hotel Version)

3.2.1 Login

Launch browser on the PC and input 'http://serverIP:port/iptv2' in the address bar (e.g. http://192.168.200.136:8030/iptv2), and the server default port number is 8030.

NOTE: The latest version of Firefox chrome and Google chrome are suggested, and the language of this management system can only be selected on the login interface.

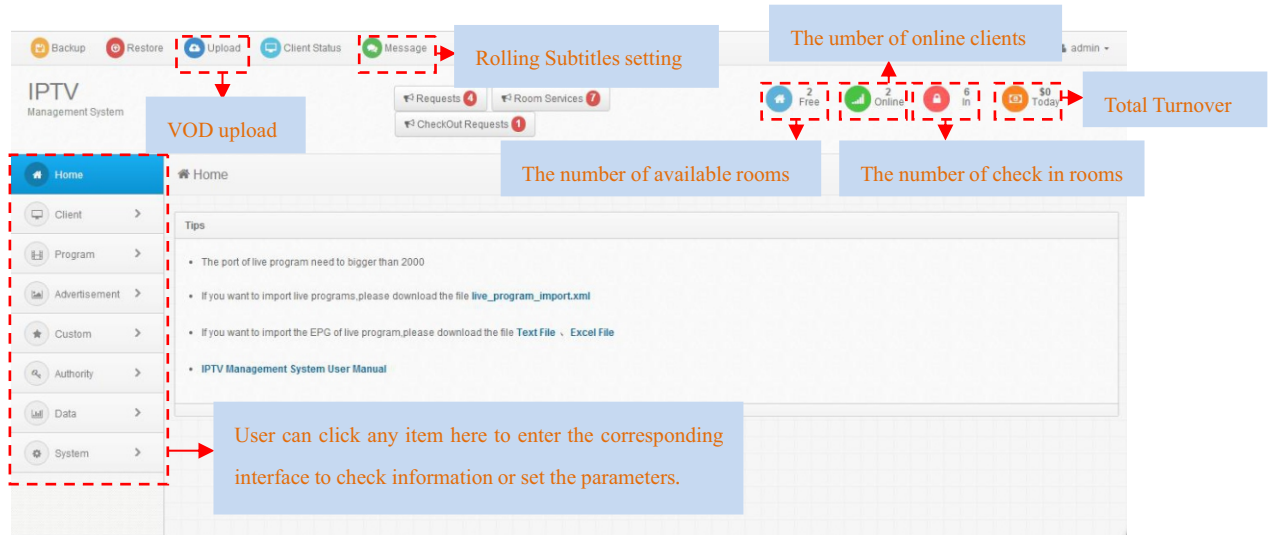
The screenshot shows the login interface of the IPTV Management System. It includes a login form with the following elements:

- Username:** A text input field with a placeholder 'Input your valid user name'.
- Password:** A text input field with a placeholder 'Input your valid password'.
- Buttons:** 'Enter' and 'Reset' buttons.
- Language Selection:** A dropdown menu showing '中文 | English' with a red dashed box and an arrow pointing to it, labeled 'Language selection area'.

3.2.2 Operation

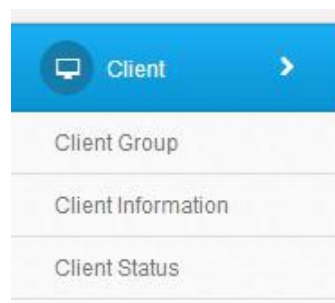
Home

When administrator confirms the login, it displays the home page interface.

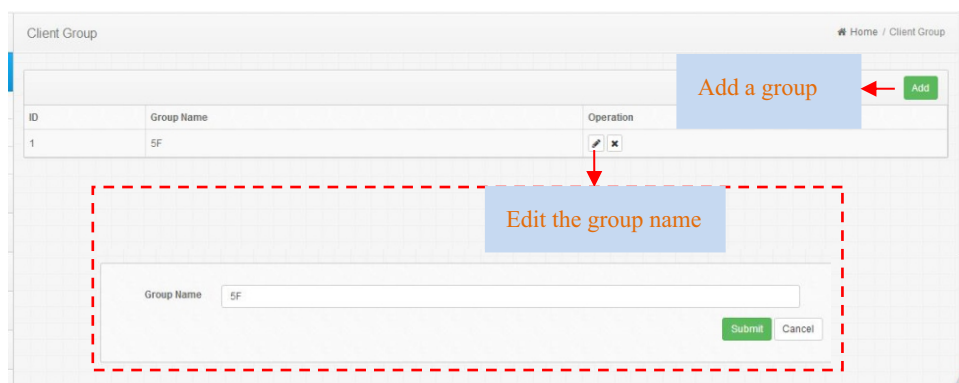


Client

Administrator can manage all STBs here.



【Client Group】: Administrator can divide clients into groups according to the hotel suite type, floor, price, etc. The different group STB can play customized live programs, text, picture and video advertisement.



NOTE:

Administrators delete group will delete all the group members' information. If administrator wants to delete a group, please assign the client group members to other group.

【Client Information】

When STB connected the server, the information of client will display on this interface, and administrator can name this client and divide it into group.

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Client Information

Home / Client Information

Add Import Delete

Input keywords to filter.

ID	Client Name	MAC Address	Client Group	Wifi	IP Address	APIK version	Status	Operation
1	0A:0A:DB:0E:DF:B0	0A:0A:DB:0E:DF:B0	5F	OFF	192.168.200.118	1.2.4	Offline	 
2	3A:56:FF:11:F7:27	3A:56:FF:11:F7:27	5F	OFF	192.168.200.22	3.0.1	Offline	 
3	A8:A6:48:EC:D8:D2	A8:A6:48:EC:D8:D2	5F	OFF	192.168.58.43	3.0.1	Online	 
4	ROOM 8506	C4:4E:AC:0B:2B:E4	5F	OFF	192.168.58.86	1.2.2	Offline	 
5	ROOM 8509	8A:6D:E4:F7:9F:CD	5F	OFF	192.168.58.48	3.0.1	Offline	 
6	test	0C:F0:B4:08:73:83	5F	OFF	192.168.58.138	3.0.3	Online	 
7	test	3A:40:11:58:E1:BE	5F	OFF	192.168.58.135	3.0.1	Offline	 
8	test	1E:B0:5B:B3:71:B4	5F	OFF	192.168.58.136	3.0.1	Offline	 

Edit

Home / Client Information / Edit

MAC Address 0A:0A:DB:0E:DF:B0

IP Address 192.168.200.118

Client Name 0A:0A:DB:0E:DF:B0

Client Group 5F

Wifi OFF

Submit Cancel

【Client Status】

Administrator can edit check in and check out information and welcome words, and check consumption information and history checking records.

NOTE: when customers check in the IPTV service can be provided.

Upload Client Status Message

admin

Input keywords to filter.

0A:0A:DB:0E:DF:B0
5F
Customer:
Sum:\$0.0
Cost:\$0.0
Remainder:\$0
2017-11-23 16:00:04

Consume
Edit
Records
Check out

3A:56:FF:11:F7:27
5F
Customer:
Sum:\$0.0
Cost:\$0.0
Remainder:\$0
2017-11-23 16:01:55

Consume
Edit
Records
Check out

A8:A6:48:EC:D8:D2
5F
Customer: H4I XIN
Sum:\$0.0
Cost:\$0.0
Remainder:\$0
2017-11-23 14:52:23

Requests 1
Consume
Edit
Records
Check out

ROOM 8506
5F
Customer: Joe
Sum:\$0.0
Cost:\$0.0
Remainder:\$0
2017-11-06 20:18:11

Consume
Edit
Records
Check out

ROOM 8509
5F
Customer: Christian
Sum:\$0.0
Cost:\$392.0
Remainder:\$-392
2017-11-18 16:31:31

Requests 1
Consume
Edit
Records
Check out

test
5F

Check in
Records

test
5F

Check in
Records

Consume

Administrators can click 'Consume' at the top of the webpage to check corresponding clients.

Consume (ROOM 8509)

Home / Client Status / Consume

Total: \$ 392.0

ID	Client Name	Type	Content	Count	Price	Order Time	Finish Time	Operation
1	ROOM 8509	Food	Chocolate Mousse	3	\$56.0	2017-11-19 13:44:04		
2	ROOM 8509	Food	Pan-fried Steak	1	\$0.0	2017-11-19 13:44:04		
3	ROOM 8509	Food	Chocolate Mousse	4	\$56.0	2017-11-19 10:44:18		

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Edit

Administrators can edit the welcome words here.

Check in (ROOM 8506)

Customer: Christian

Sum\$: 0.0

Welcome Words(Chinese): %s% : 欢迎入住悦庭酒店, 祝您旅途愉快!

Welcome Words(English): %s% : Welcome to YueTing Hotel!

Submit Cancel

Records

Administrators can check the consumption record here.

Records (ROOM 8509)

ID	Customer	check in time	check out time	Cost	Operation
1	Christian	2017-11-18 16:31:31	2017-11-23 16:13:37	\$382.0	\$

Check out

Administrators can manage the check out information here.

Client Status

Dialog

Confirm to check out ROOM 8509?

OK Cancel

Program

【Program】

Administrators can manage the Live and VOD programs here.

Program

- Live Packages
- Live Program
- VOD Type
- Video Upload
- VOD Program
- Forced in-stream

【Live Packages】

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Administrator can package the live programs, set price and select the STB to receive the programs.

Live Packages

Id	Name	Price	Image	Client Image Visibility	Operation
1	CCTV	\$0.0		hidden	
2	new	\$0.0		Visible	

Edit

Id:
Name:
Price(\$):
Image: Visible [Change Image](#)

Program Select

- All Programs
- CCTV-1
- CCTV-2
- CCTV-3
- CCTV-4
- CCTV-5

STB Select

- All
- 0A:0A:D8:0E:DF:80
- 1A:2E:FE:11:F7:57
- 1A:2E:FE:11:F7:57
- ROOM 8509
- ROOM 8509
- test
- test
- test

[Submit](#) [Cancel](#)

Live programs management: edit programs information including program name, programs' ID and logo etc.

NOTE: when HTTP live protocol is selected, the code rate information will display on this interface.

【Live Program】 Administrator can manage the Live programs here.

IPTV Management System

Backup Restore Upload Client Status Message

Requests Room Services CheckOut Requests

0 Free 0 Online 0 In 0 Today

Live Program

input keywords to filter

Id	Name	URL	Image	Client Image Visibility	Timeshift	Operation
☐ 1	CCTV-1	http://192.168.200.66:8060/hls/2/2.m3u8		Visible	Start	
☐ 1	CCTV-2	http://192.168.200.66:8060/hls/3/3.m3u8		Visible	Start	
☐ 1	CCTV-3	http://192.168.200.66:8060/hls/4/4.m3u8		Visible	Start	

[Reset](#) [Program Synchronization](#) [Jump to Edit Page](#)

Click it to enter into IPTV gateway management

IPTV Gateway Server User's Manual

Id: 1

Name: CCTV-1

URL: udp://239.93.0.88:5140

Image:  ☒ Visible [Change Image](#)

Submit Cancel

If user does click this box, the program will be visible at client interface.

NOTE: Please input full address, including protocol, IP, port and other related information.

Administrator can download the files' format at the home page to batch import programs, and import files after filling in programs.

If user does click “☒ Visible” here, the program will be visible at client interface.

Administrator can click “☐ EPG” to check program EPG information within one week. It only support off-line import at present, and download the imported files' format at the home page.

【VOD Type】

Administrator can classify VOD programs here.

VOD Type

Home / VOD Type

Add

ID	Name	Operation
1	Action	
2	Drama	
3	Cartoon	
5	Disaster	
6	test	
7	test	

Edit

Home / VOD Type / Edit

ID: 1

Name: Action

Submit Cancel

【Video Upload】

Administrators can upload video to server drives.

Video Upload

Home / Video Upload

Choose File Delete

input keywords to filter.

File Name	Size	Upload Time	Operation
All	Used: 123.60 MB Free: 501.52 GB		
1 apanda.mp4	19.05 MB	2017-11-06 10:21:05	
2 apanda11.mp4	19.05 MB	2017-11-10 10:22:13	
3 hobbit.mp4	48.40 MB	2017-11-06 10:21:04	
4 now.mp4	37.11 MB	2017-11-06 10:21:05	

NOTE:

The uploaded video file name can only consist of numbers, subtitles and underline. File names contain with

IPTV Gateway Server User's Manual

Chinese or other special symbol, which can also be uploaded to the server, but the set-top box port can not be played normally.

It support upload and select multiple files at the same time.

Please do not close this page in the process of uploading; if other pages are needed to operate, please open a new page.

【VOD Program】

Administrator can manage VOD programs.

VOD programs management: administrator can edit video information here.

The screenshot displays the 'VOD Program' management interface. At the top, there are 'Add' and 'Delete' buttons and a search bar labeled 'input keywords to filter:'. Below is a table listing VOD programs with columns: ID, Poster, Name, Price, Area/Language, Director/Actors, Screen Time, VOD Type, Click Rate, and Operation. Five programs are listed, including 'Now You See Me' and 'The Dark Knight'. A red arrow points from the 'Operation' column of the first row to the 'Edit' form below.

The 'Edit' form for 'Now You See Me' includes fields for: Poster (with a 'Change Image' button), Name, Price(\$), Director, Actors, Area, Language, Screen Time, VOD Type (set to Drama), Tag (with 'Hot' and 'HD' checkboxes), Off sale, and Introduction. At the bottom are 'Submit' and 'Cancel' buttons.

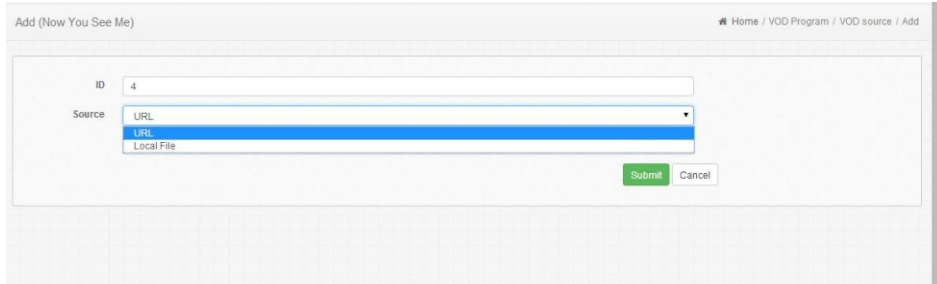
Administrator can click  to check VOD source, and set VOD source as local files or network address.

NOTE: Administrators can upload local video files or input the available URL address.

The screenshot shows the 'VOD source (Now You See Me)' interface. It features an 'Add' button and a table with columns: ID, Source, and Operation. Three sources are listed, all as 'Local File' with .mp4 extensions. Each row has edit and delete icons in the 'Operation' column.

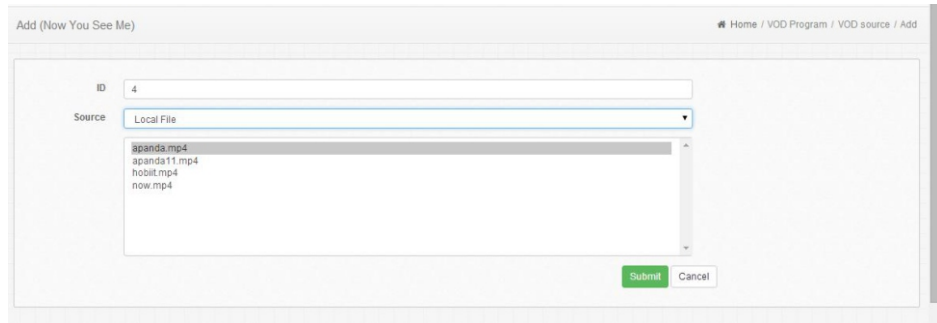
Select the video source

IPTV Gateway Server User's Manual



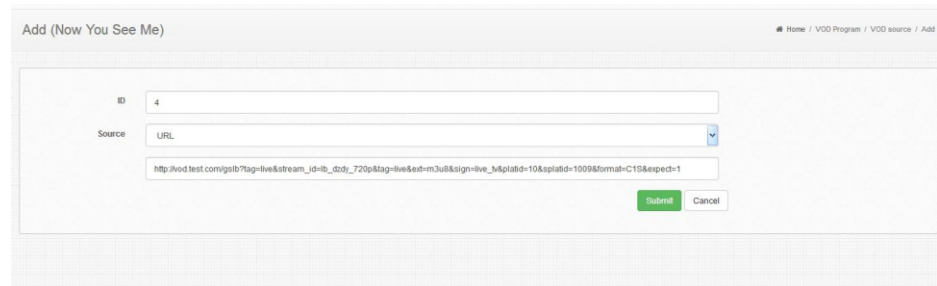
The screenshot shows a web form titled "Add (Now You See Me)". It has a breadcrumb trail: Home / VOD Program / VOD source / Add. The form contains an "ID" field with the value "4". The "Source" dropdown menu is open, showing two options: "URL" (which is highlighted in blue) and "Local File". There are "Submit" and "Cancel" buttons at the bottom right.

Select the uploaded video source



The screenshot shows the same web form, but now the "Source" dropdown menu is set to "Local File". Below the dropdown, a list of video files is displayed: "apanda.mp4", "apanda11.mp4", "hobbit.mp4", and "now.mp4". The "Submit" and "Cancel" buttons are still present at the bottom right.

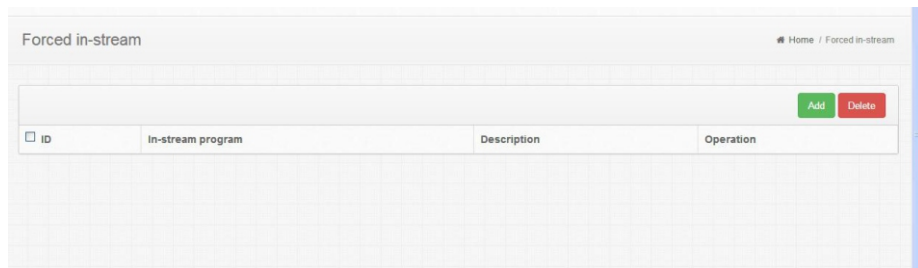
Input video URL address



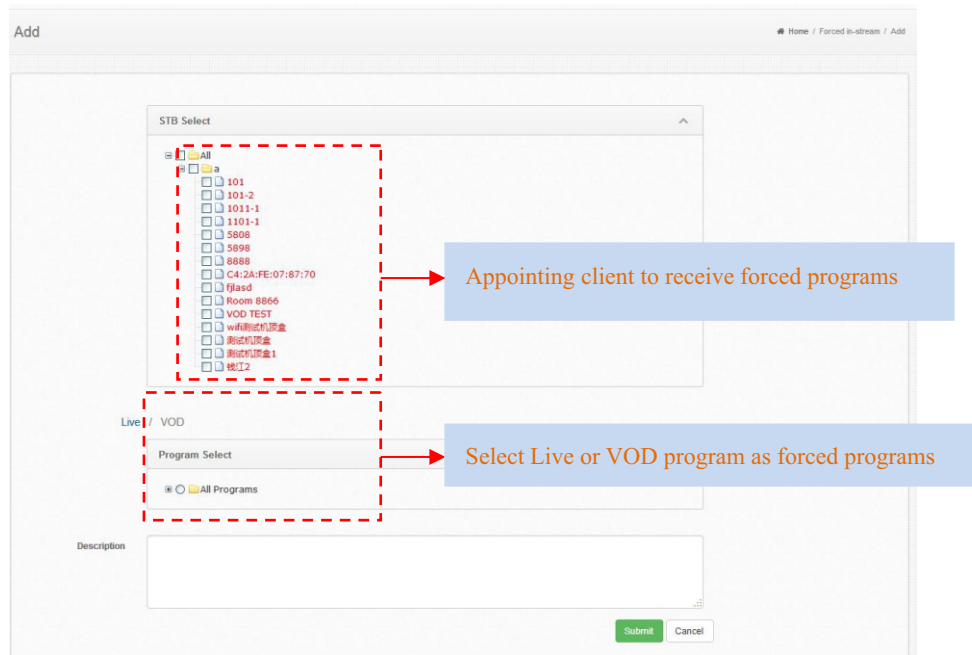
The screenshot shows the same web form, but now the "Source" dropdown menu is set to "URL". A long URL is entered in the text field below the dropdown: "http://vod.test.com/gslb?tag=live&stream_id=ib_dtdj_720p&tag=live&ext=m3u8&sign=live_h&platid=10&spatid=1009&format=CTS&specd=1". The "Submit" and "Cancel" buttons are still present at the bottom right.

【Forced in-stream】

Administrator can select one program as forced program to the appointed client.

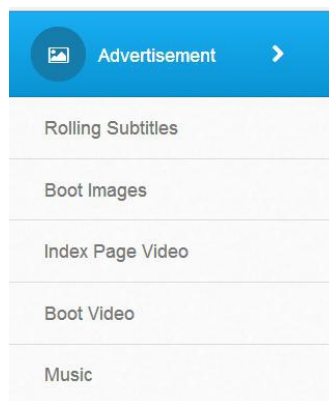


The screenshot shows a web page titled "Forced in-stream". It has a breadcrumb trail: Home / Forced in-stream. There are "Add" and "Delete" buttons at the top right. Below them is a table with the following columns: "ID", "In-stream program", "Description", and "Operation". The table is currently empty.



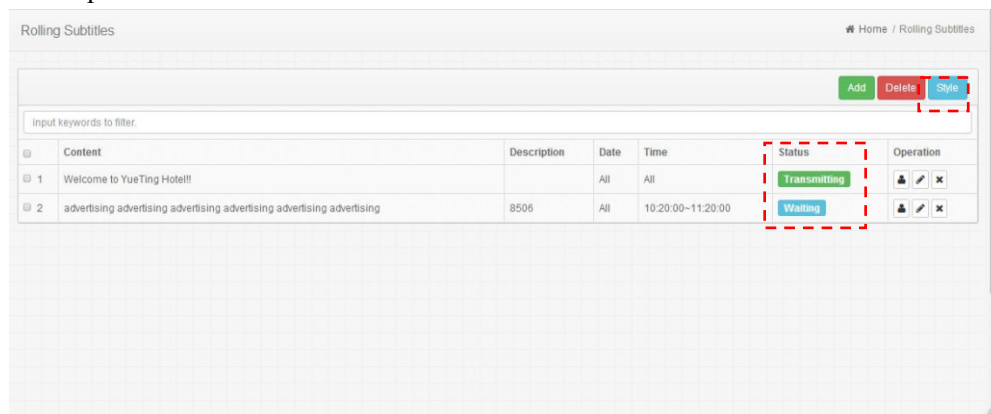
Advertisement

Administrator can click “Advertisement” to manage rolling subtitles, boot images, index page video and boot video displaying on client interface.

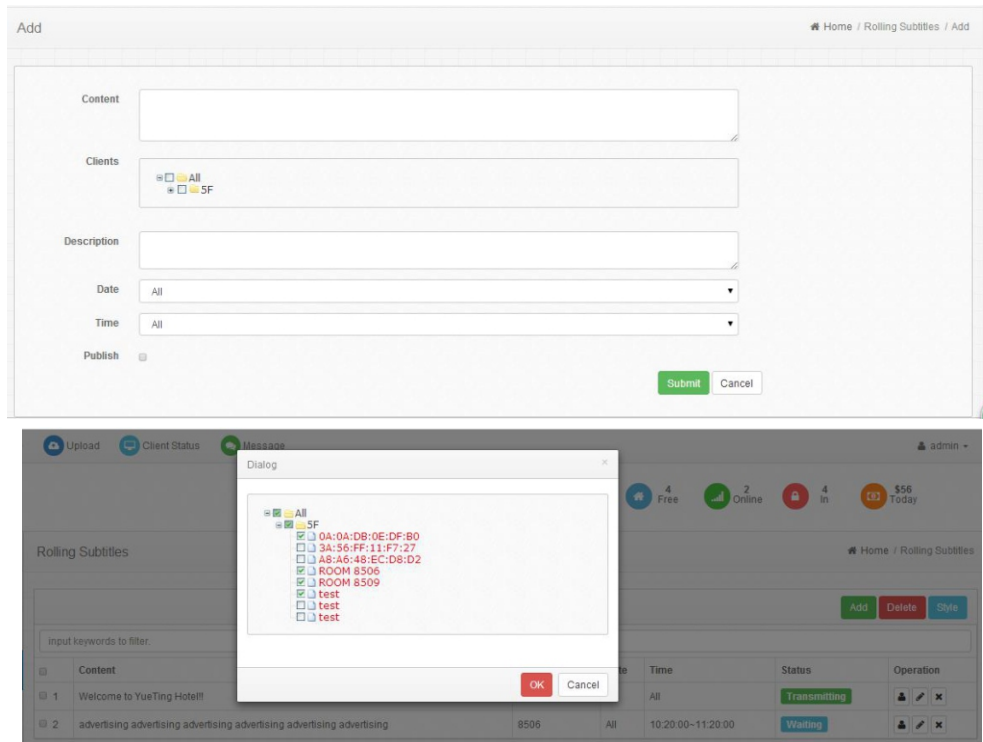


【Rolling Subtitles】

Administrator can set rolling Subtitles to send text to specified client at specified date and time. The text will roll at the top of the screen.



IPTV Gateway Server User's Manual



Status:

【Transmitting】 The text is rolling at specified client.

【Timeout】 The text is expired and will not send.

【Waiting】 The text is waiting for sending.

【Unpublished】 The text is unpublished and will not send to client. Administrator can click **Publish**  to publish the text.

Administrator can click “Style” to set and preview the rolling subtitle style, including rolling text size, color, background, interval rolling time.



【Boot Images】

Administrators edit the images that will be displayed on client, and different client can be set different homepage advertisement.

NOTE: Administrator can only choose one between image advertisement and video advertisement.

IPTV Gateway Server User's Manual

Boot Images

Home / Boot Images

AddDelete

Input keywords to filter:

ID	Image	Description	Operation
1			 
2			 
3			 
4			 

Edit

Home / Boot Images / Edit

Image  Change Image

Clients

All SF

Description

SubmitCancel

Add

Home / Boot Images / Add

Image  Change Image

Clients

All SF

☐ 04:0A:DB:0E:DF:80
☐ 3A:56:FF:11:F7:27
☐ A8:A6:48:EC:D8:D2
☐ ROOM 8506
☐ ROOM 8509
☐ test
☐ test
☐ test

Description

SubmitCancel

【Index Page Video】

Administrators edit the video that will be displayed on client, and different client can be set different homepage advertisement.

NOTE: Administrator can only choose one between image advertisement and video advertisement.

Index Page Video

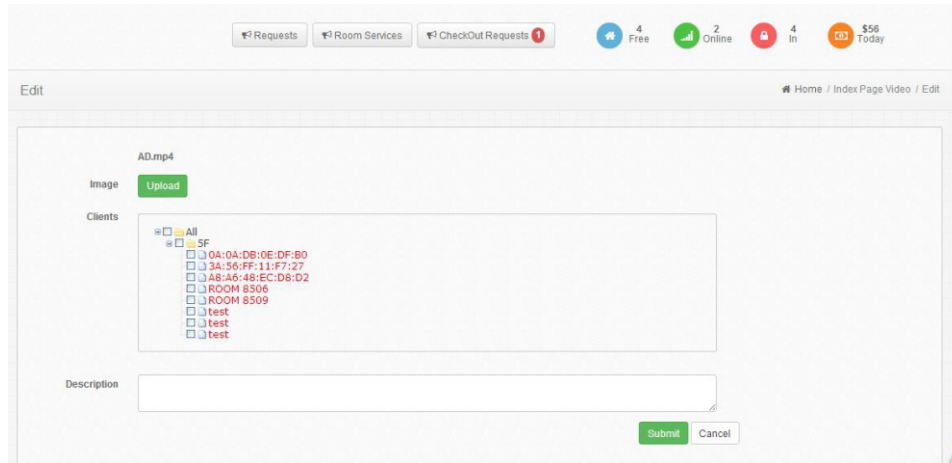
Home / Index Page Video

AddDelete

Input keywords to filter:

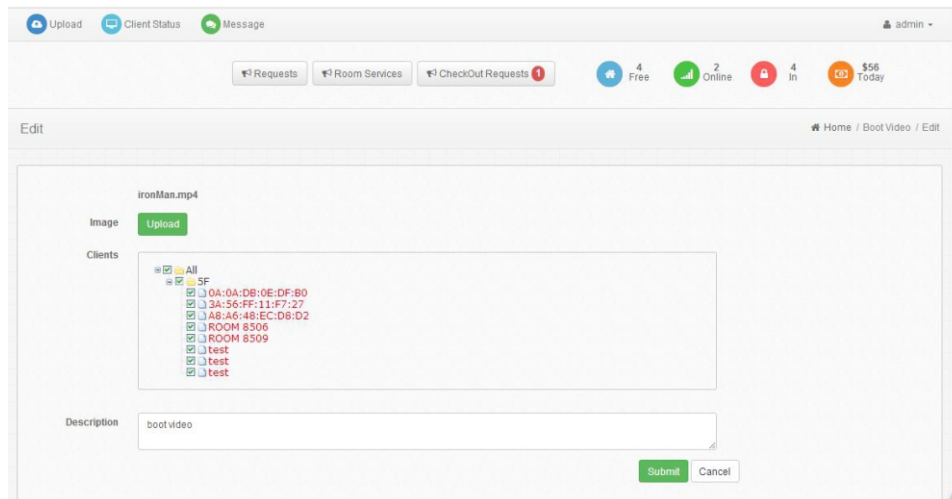
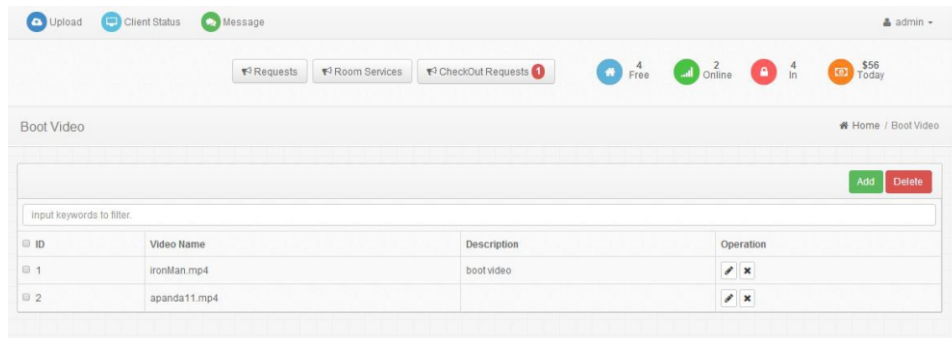
ID	Video Name	Description	Operation
1	AD.mp4		 
2	apanda11.mp4		 

IPTV Gateway Server User's Manual



【Boot Video】

Administrator can manage the video which playing on the client when it is turned on. Different client can be set different video.



【Music】

Administrator can add the music which playing on the client when it is turned on.

IPTV Gateway Server User's Manual

Music

Home / Music

input keywords to filter.

ID	Music Name	Description	Operation
1	林俊杰 - 一生的爱 MP3		
2	陈奕迅-浮夸 APE		
3	杨宗纬-一次就好 APE		
4	泳儿海鸣威-你的承诺 MP3		

Add

Home / Music / Add

music

Upload music from local, and modify information.

Clients

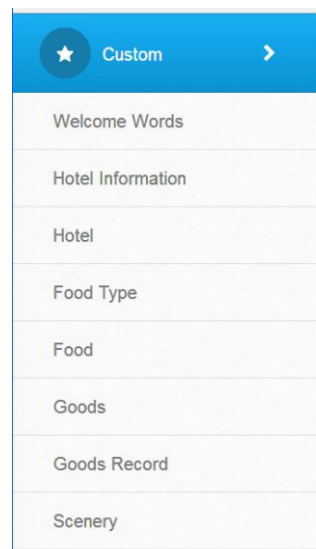
- All
- 101
- 101-2
- 1011-1
- 1101-1
- 5808
- 5898
- 8888
- C4:2A:FE:07:87:70
- flasd
- Room 8866
- VOD TEST
- well测试机顶盒
- 测试机顶盒1
- 松江2

Appointing client to turn on STB with music

Description

Custom

This column can be made to different customized content for meeting different demands.



【Welcome Words】 Administrator can edit English or Chinese welcome words here.

IPTV Gateway Server User's Manual

Edit Home / Hotel / Edit

Image  [Change Image](#)

Name

Hotel Information Room Info Select room classification

Description

[Submit](#) [Cancel](#)

【Food Type】 Administrator can edit food types here.

Food Type Home / Food Type

[Add](#)

ID	Name	Operation
1	Desserts	Edit Delete
2	Western-style food	Edit Delete

Edit Home / Food Type / Edit

ID

Name

[Submit](#) [Cancel](#)

【Food】 Administrator can edit food information here.

1 Requests 1 Room Services 1 CheckOut Requests 4 Free 2 Online 4 In \$56 Today

Food Home / Food

[Add](#) [Delete](#)

Input keywords to filter:

ID	Image	Name	Price	Food Type	Description	Sale Count	Operation
1		Chocolate Mousse	\$56.0	Desserts		24	Edit Delete
2		Pan-fried Steak	\$0.0	Western-style food		23	Edit Delete

Edit Home / Food / Edit

Image  [Change Image](#)

Name

Price(\$)

Food Type

Description

[Submit](#) [Cancel](#)

【Goods】 Administrator can edit goods information here.

IPTV Gateway Server User's Manual

Welcome Words

Home / Welcome Words

ID	Welcome Words(Chinese)	Welcome Words(English)	Operation
1	%s%: 欢迎入住悦庭酒店, 祝您旅途愉快!	%s%: Welcome to YueTing Hotel!	✎ ✕

Add

Add

Home / Welcome Words / Add

ID

input a number for sorting.

Clients

☒ All
☒ SF

Welcome Words(Chinese)

使用 %s% 表示客户名称, 如尊敬的%s%

Welcome Words(English)

use %s% replace customer name, for example: Dear Mr.%s%

【Hotel Information】 Administrator can classify or name rooms here.

Hotel Information

[Home](#) / [Hotel Information](#)

Add

ID	Name	Operation
1	Room Introduction	✎ ✕
2	Hotel Introduction	✎ ✕
3	Parking Lot	✎ ✕
4	Dinning Room Introduction	✎ ✕
6	Bar	✎ ✕
7	Coffee	✎ ✕
8	Gym	✎ ✕

Edit

Home / Hotel Information / Edit

ID

2

Name

Room intro

Submit

Cancel

【Hotel】 Administrator can edit the room information here.

Hotel

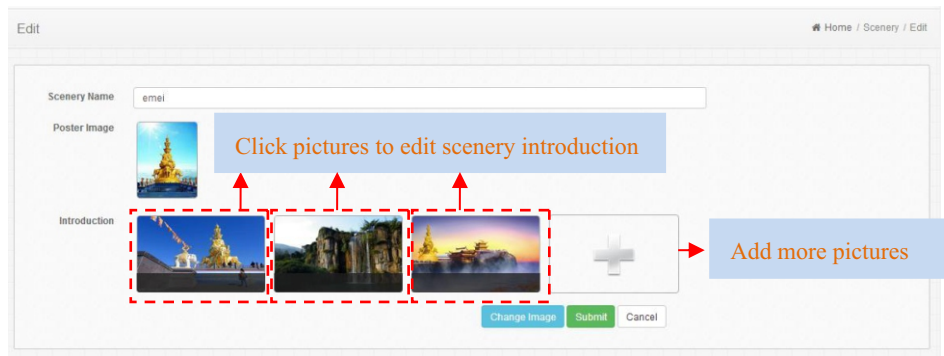
Home / Hotel

Add

Deletes

input keywords to filter.

ID	Image	Name	Name	Description	Operation
1		Deluxe King Room	Room intro	Our hotel to the six floor on the fourth floor has a sweet and comfortable standard room, the room has two X2 meters 1.2 meters bed two zhang and a 32 inch LCD TV, each room has free wireless Internet and 24 hour hot water service	
2		Deluxe Twin Room	Room intro	Our hotel to the six floor on the fourth floor has a sweet and comfortable standard room, the room has two X2 meters 1.2 meters bed two zhang and a 32 inch LCD TV, each room has free wireless Internet and 24 hour hot water service	
3		Hotel Conference Hall	Room intro	test testtestestesttestest test testtestestesttest	



Authority

Administrators can distribute authority to back-stage manager.



【Manager Role】

Administrator can distribute role authority by this, and the defaulted role is Administrator. It owns the highest authority, and can not be modified and deleted.

Manager Role				
ID	Role Name	Description	Create Time	Operation
1	Administrator	System administrator , can not delete.	2017-11-04 13:34:49	

Add

Role Name

Description

Authority

- ☐ All
- ☐ Client
 - ☐ Requests
 - ☐ CheckOut Requests
 - ☐ Client Information
 - ☐ Client Group
 - ☐ Client Status
- ☐ Program
 - ☐ Live Program
 - ☐ Live Package
 - ☐ EPG
 - ☐ VOD Program
 - ☐ VOD Type
 - ☐ VOD Resource
 - ☐ Video Upload
- ☐ Advertisement
 - ☐ Rolling Subtitles
 - ☐ Style
 - ☐ Boot Images
 - ☐ Index Page Video
 - ☐ Boot Video
- ☐ Custom
 - ☐ Welcome Words
 - ☐ Hotel
 - ☐ Hotel Information
 - ☐ Food
 - ☐ Goods
 - ☐ Room Service History
 - ☐ Food Type
 - ☐ Scenery
- ☐ Authority
 - ☐ Manager Role
 - ☐ Manager
- ☐ Data
 - ☐ Charts
 - ☐ Evaluation System
- ☐ System
 - ☐ Settings
 - ☐ Version
 - ☐ Streaming Media
 - ☐ Server

Submit
Cancel

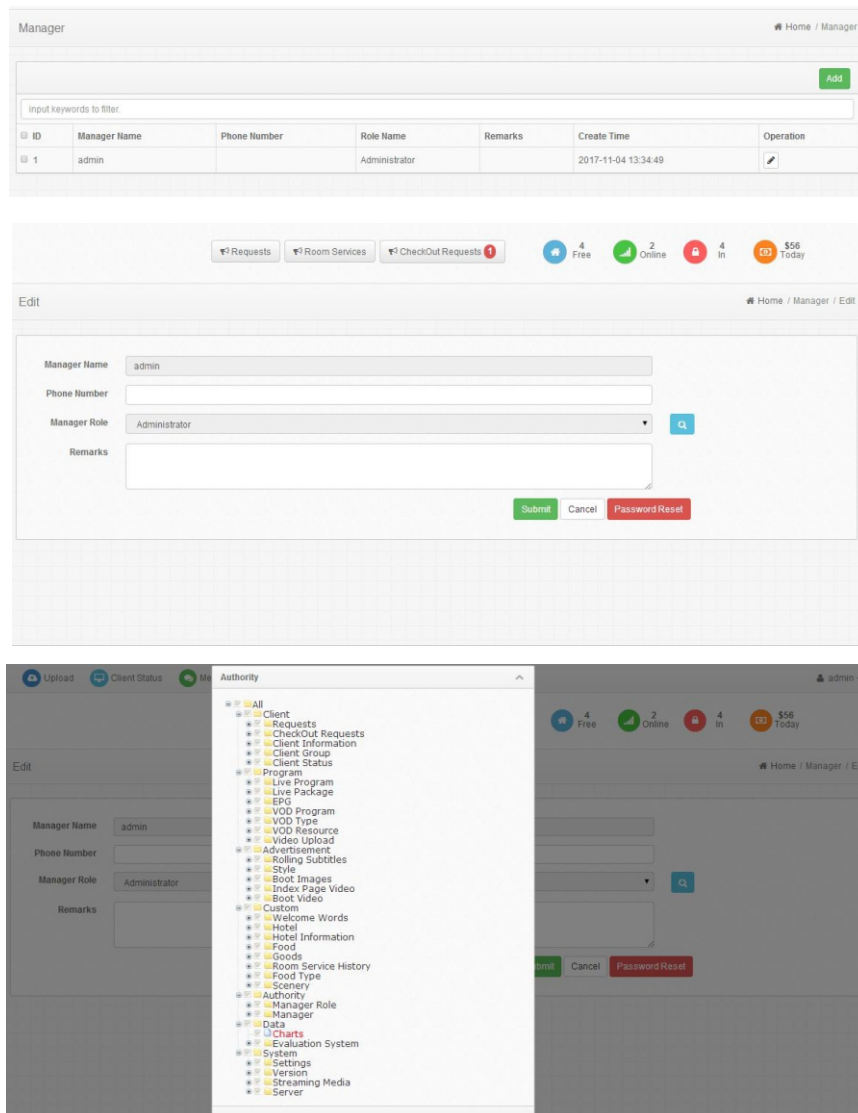
NOTE:

Administrators delete roles will lead to all accounts lose all authorities, and cannot be operated.

【Manager】

IPTV Gateway Server User's Manual

Administrator can create, edit and distribute the back-stage manager's login number; the defaulted manager name is “admin”, and password is “123456”.



Data

Administrators can check data information here.



【Chart】 Administrators can check the turnover and VOD data on this interface.



IPTV Gateway Server User's Manual

Goods
Home / Goods

Add
Delete

ID	Image	Name	Count	Operation
1		Power converter	5	✎ ✕
2		Mobile phone charging line	3	✎ ✕
3		Umbrella	1	✎ ✕

Edit
Home / Goods / Edit

Image


Change Image

Name

Submit
Cancel

【Goods Record】 Administrator can check the goods rental records here.

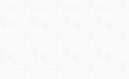
Goods Record
Home / Goods Record

ID	Client Name	Customer	Service Name	Details	Oder Time	Response Time	Finished time	Status	Operation
1			Laundry Service		2017-11-10 10:12:09	2017-11-10 10:12:18	2017-11-10 10:12:20	Finish	Delete
2			Butler Service		2017-11-10 10:12:06	2017-11-10 10:12:16	2017-11-10 10:12:17	Finish	Delete
3			Butler Service		2017-11-10 10:09:22	2017-11-10 10:09:44	2017-11-10 10:09:45	Finish	Delete
4			Laundry Service		2017-11-10 10:09:20	2017-11-10 10:09:42	2017-11-10 10:09:43	Finish	Delete
5			Wake Up Call	Wakeup Time: 2017-11-10 10:09:00	2017-11-10 10:09:14	2017-11-10 10:09:39	2017-11-10 10:09:41	Finish	Delete
6			Wake Up Call	Wakeup Time: 2017-11-06 14:06:00	2017-11-06 14:06:41	2017-11-07 17:44:30	2017-11-07 17:44:32	Finish	Delete
7			Goods Borrowing	Umbrella	2017-11-06 14:06:35	2017-11-07 17:44:27	2017-11-07 17:44:46	Returned	Delete
8			Goods Borrowing	Mobile phone charging line	2017-11-06 14:06:33	2017-11-07 17:45:07	2017-11-07 17:45:19	Returned	Delete

【Scenery】 Administrator can edit scenery information here.

Scenery
Home / Scenery

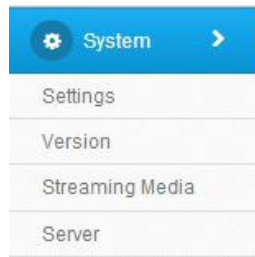
Add
Delete

ID	Scenery Name	More Information	Operation
1		  	✎ ✕
2		    	✎ ✕

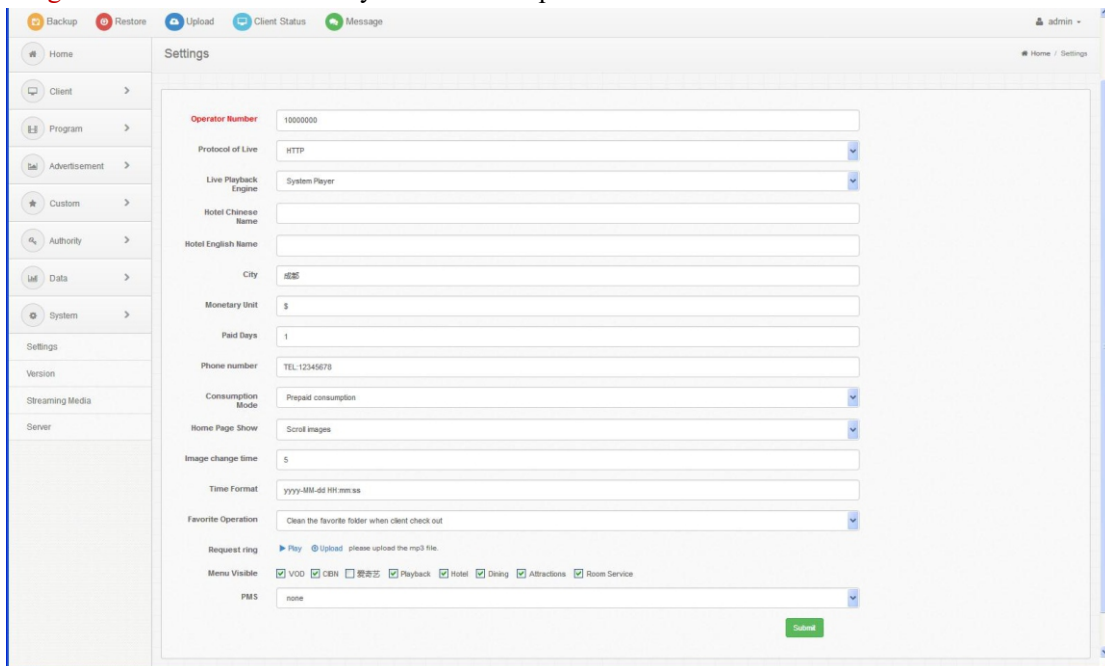
IPTV Gateway Server User's Manual

System

Administrator can set system common parameters, manage client version and check server status.

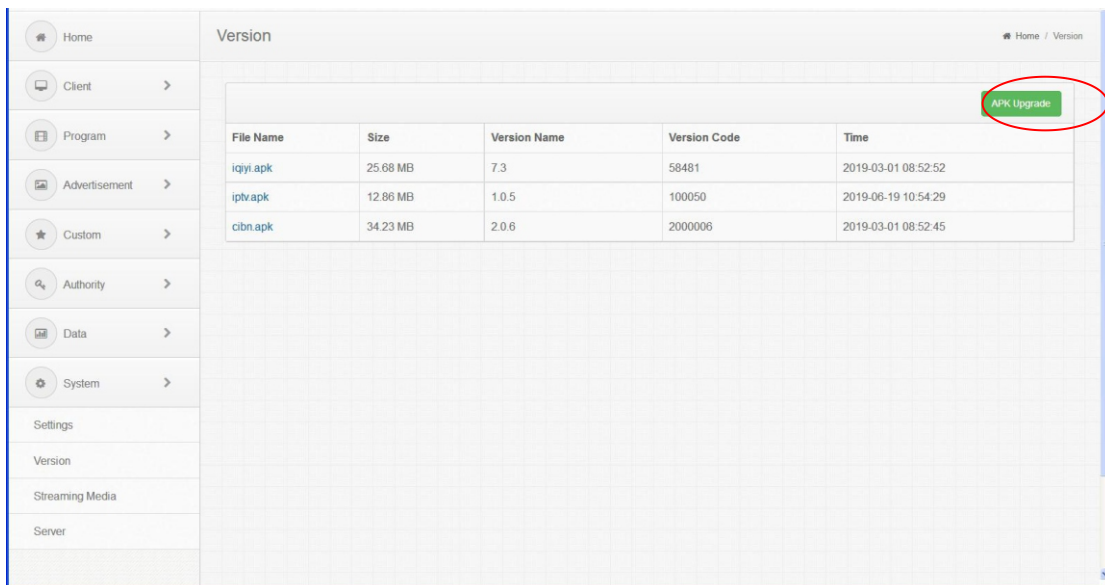


【Settings】 Administrator can set system common parameters here.



Operator Number	10000000
Protocol of Live	HTTP
Live Playback Engine	System Player
Hotel Chinese Name	
Hotel English Name	
City	成都
Monetary Unit	\$
Paid Days	1
Phone number	TEL:12345678
Consumption Mode	Prepaid consumption
Home Page Show	Scroll images
Image change time	5
Time Format	yyyy-MM-dd HH:mm:ss
Favorite Operation	Clean the favorite folder when client check out
Request ring	Play Upload please upload the mp3 file.
Memo Visible	☒ VOD ☒ CDN ☐ 预付费 ☒ Playback ☒ Hotel ☒ Dining ☒ Attractions ☒ Room Service
PMS	none

【Version】 Administrator can upload APK to update the STBs.



File Name	Size	Version Name	Version Code	Time
iqiyi.apk	25.68 MB	7.3	58481	2019-03-01 08:52:52
iptv.apk	12.86 MB	1.0.5	100050	2019-06-19 10:54:29
cibn.apk	34.23 MB	2.0.6	2000006	2019-03-01 08:52:45

【Streaming Media】 Administrator can set the streaming media here

Note: this page is generally prohibited from modification, please contact the technical staff if it is changed.

IPTV Gateway Server User's Manual

Streaming Media Home / Streaming Media

(Warning! This page is generally prohibited from modification. Please contact the technical staff if it changes)

Streaming IP	192.168.58.199
Streaming Port	50000
Timeshift IP	192.168.58.199
Timeshift Port	50000
Timeshift hours	2

Submit

【Server】 Administrator can check server parameters status, including OS , internal memory , rigid disk, CPU, and network.

Server

Home / Server

OS

Architecture	Data Model	Description	Name	Version
x86_64	64	CentOS 7.2.1511	Linux	3.10.0-327.el7.x86_64

Memory

Total	Used	Free	Used Percent
15.47 GB	1.53 GB	13.94 GB	8%

Rigid Disk

ID	Directory	Total	Used	Free	Avail	Used Percent
1	/dev/sda3	519.75 GB	18.22 GB	501.52 GB	501.52 GB	4%
2	/dev/sda2	4.99 GB	161.12 MB	4.83 GB	4.83 GB	4%

CPU

ID	Model	Basic Frequency	Cache Size	User	System	Combined	Idle
1	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
2	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
3	Xeon	2800MHz	20.00 MB	0%	2%	2%	97%
4	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
5	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
6	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
7	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
8	Xeon	2800MHz	20.00 MB	0%	1%	1%	98%
9	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
10	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
11	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
12	Xeon	2800MHz	20.00 MB	0%	0%	0%	100%
13	Xeon	2800MHz	20.00 MB	0%	2%	2%	98%
14	Xeon	2800MHz	20.00 MB	2%	2%	4%	95%
15	Xeon	2800MHz	20.00 MB	2%	0%	2%	97%
16	Xeon	2800MHz	20.00 MB	0%	2%	2%	98%

Net

ID	Device Name	Device Name	IP	Subnet Mask	Type	Receive Packets	Receive Bytes	Transmit Packets	Transmit Bytes
1	lo	00:00:00:00:00:00	127.0.0.1	255.0.0.0	Local Loopback	12155941	1833356604	12155941	1833356604
2	em1	C8:1F:66:D5:D7:85	192.168.58.199	255.255.255.0	Ethernet	2578792323	3512291897115	3565	1727660
3	em2	C8:1F:66:D5:D7:86	192.168.58.199	255.255.255.0	Ethernet	113924523	10430252476	155990280	214197156590
4	em3	C8:1F:66:D5:D7:87	192.168.200.199	255.255.255.0	Ethernet	471480250	379819521382	218287244	303372072405
5	em4	C8:1F:66:D5:D7:88	192.168.5.200	255.255.255.0	Ethernet	0	0	0	0

Chapter 4 Troubleshooting

DIBSYS's ISO9001 quality assurance system has been approved by CQC organization. For guarantee the products' quality, reliability and stability. All DIBSYS products have been passed the testing and inspection before ship out factory. The testing and inspection scheme already covers all the Optical, Electronic and Mechanical criteria which have been published by DIBSYS. To prevent potential hazard, please strictly follow the operation conditions.

Prevention Measure

Installing the device at the place in which environment temperature between 0 to 45 °C

Making sure good ventilation for the heat-sink on the rear panel and other heat-sink bores if necessary

Checking the input AC within the power supply working range and the connection is correct before switching on device

Checking the RF output level varies within tolerant range if it is necessary

Checking all signal cables have been properly connected

Frequently switching on/off device is prohibited; the interval between every switching on/off must greater than 10 seconds.

Conditions need to unplug power cord

Power cord or socket damaged.

Any liquid flowed into device.

Any stuff causes circuit short

Device in damp environment

Device was suffered from physical damage

Longtime idle.

After switching on and restoring to factory setting, device still cannot work properly.

Maintenance needed

IPTV Gateway Server User's Manual

Villatel Telecomunicaicones

Dirección: Avenida Arequipa N°340 oficina 301 Cercado de Lima

Cel: +51 944693366 - +51 996885226