



## VJMS3 USER MANUAL

REV: 1524

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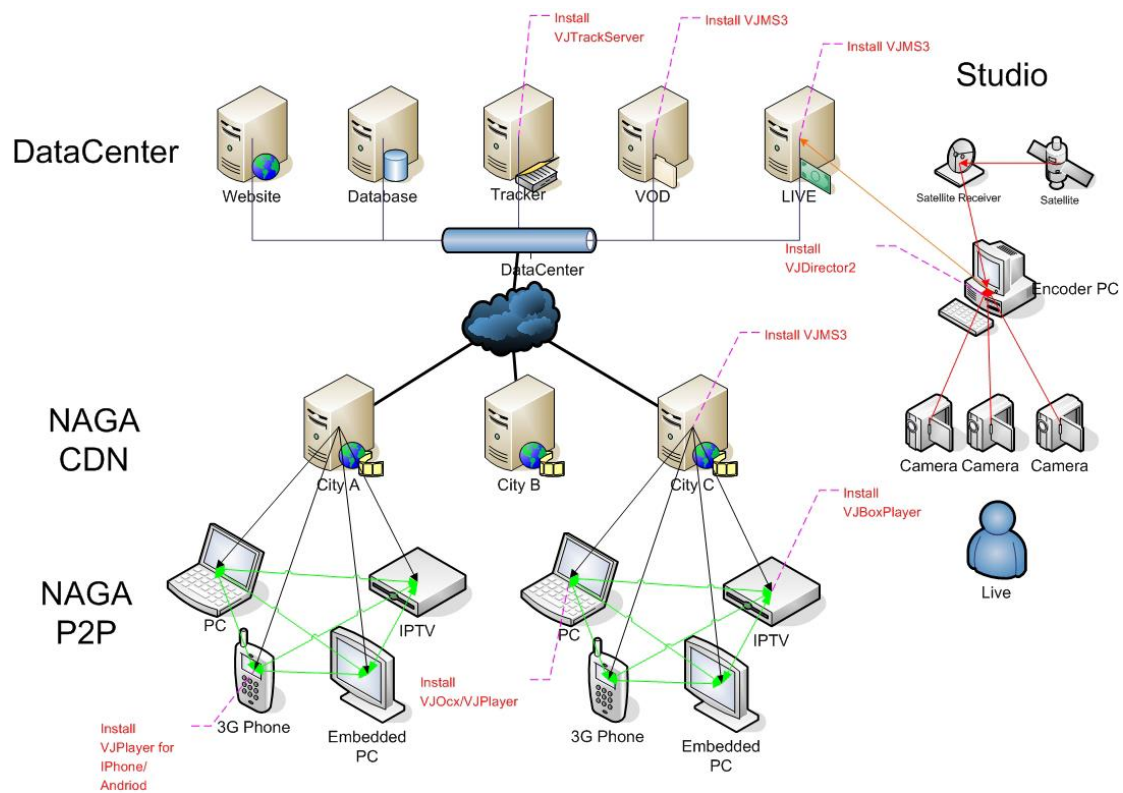
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# 1. VJMS3 System Deployment Diagram



## VJMS3 Product Composition

VJLIVE	LIVE Streaming Server
VJVOD	VOD Streaming Server
VJMIS	Media Manager Server
VJPlayer series	Players
VJSAC	Admin Client
Track Server	P2P Track Server

## 2. Track server

The users on trial can skip this chapter. We only supply the installation package for the users who purchase this software.

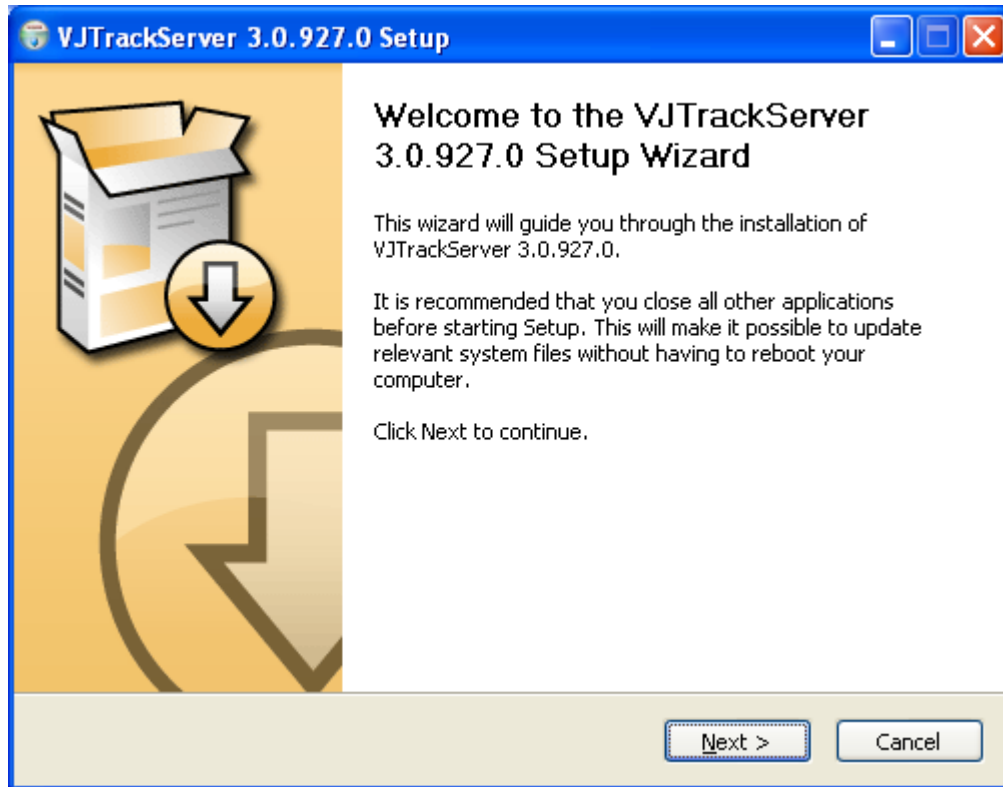
### 2.1 Operating Environment

- 1) Hardware Environment
  - Processor: Xeon 4Cores
  - RAM: 4GB
  - Hard Disk: At least 500 MB free space
- 2) Software Environment
  - OS: Win2003, Win2008, win2012, 32bits or 64bits

## 2.2 Installation process

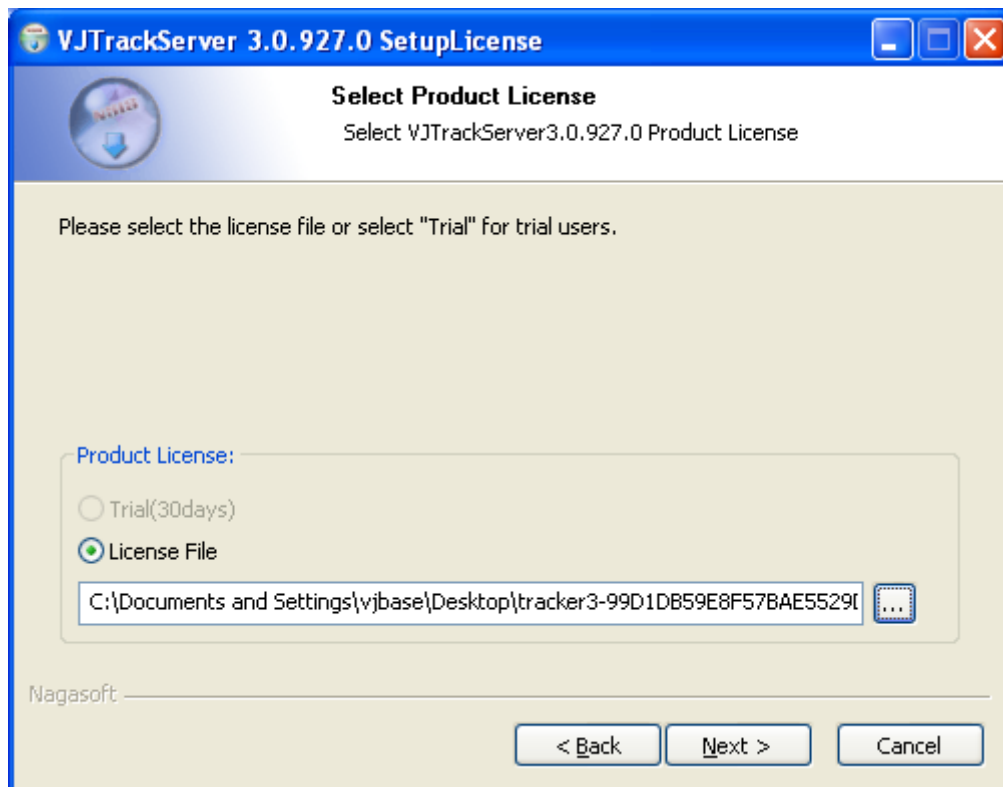
Extract VJTrackServer packet then run VJTrackServer-3.0.exe. If window security permission appears, say yes and start the installation process. Just keep all settings as by default. As shown below.

### 1) Installation

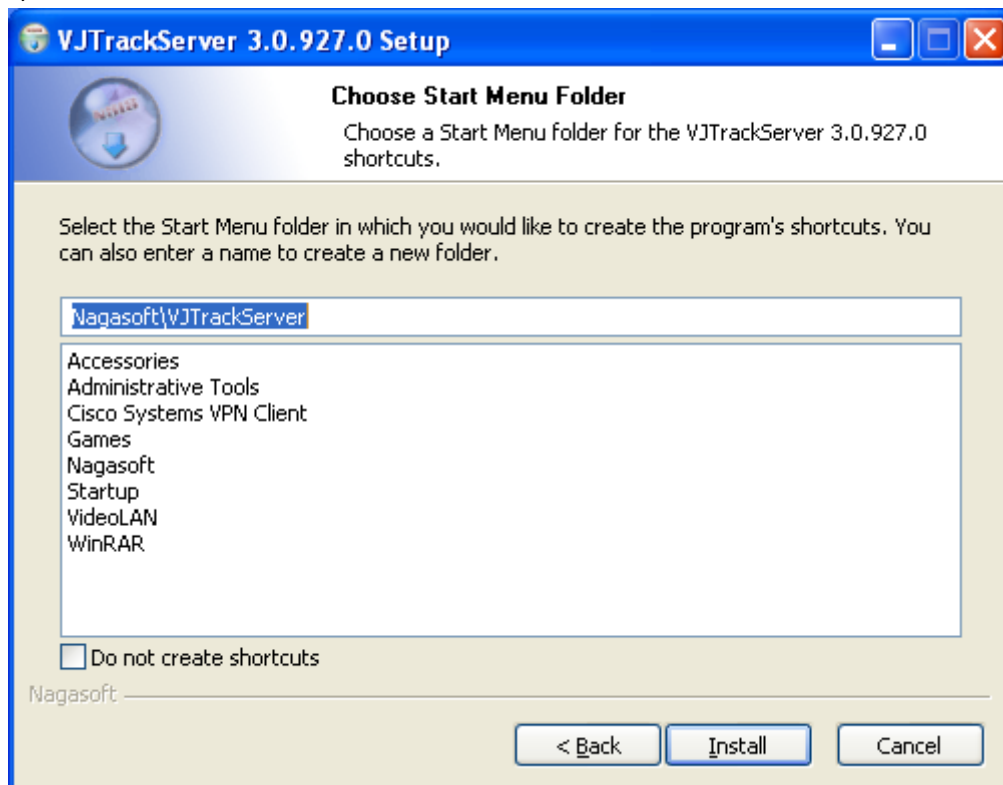


Select the license file. VJTrackServer cannot choose for trial. You must select the valid license file to continue the next step of the installation. For license file, please contact us via Email or Skype. The marketing department Email: [marketing@nagashare.com](mailto:marketing@nagashare.com), technical assistance you can contact us Email: [help@nagashare.com](mailto:help@nagashare.com) or you can contact us on Skype : bournehl, nagasoft\_support. After receive the license file, you can continue the installation process.

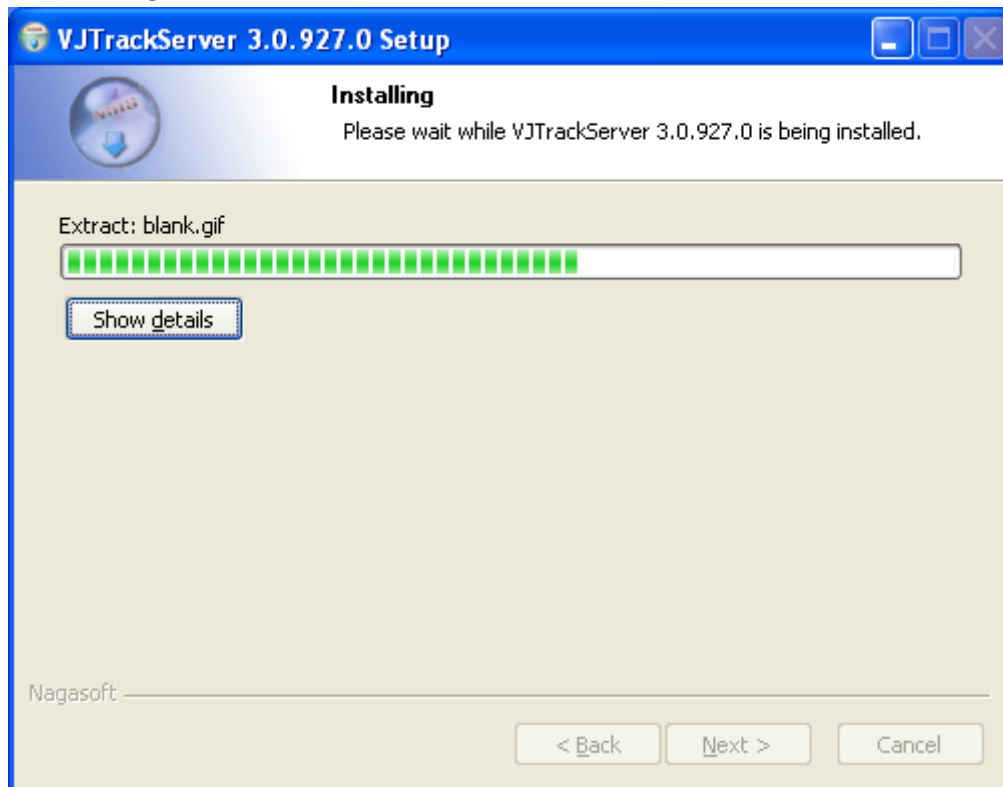
### 2) Setup License



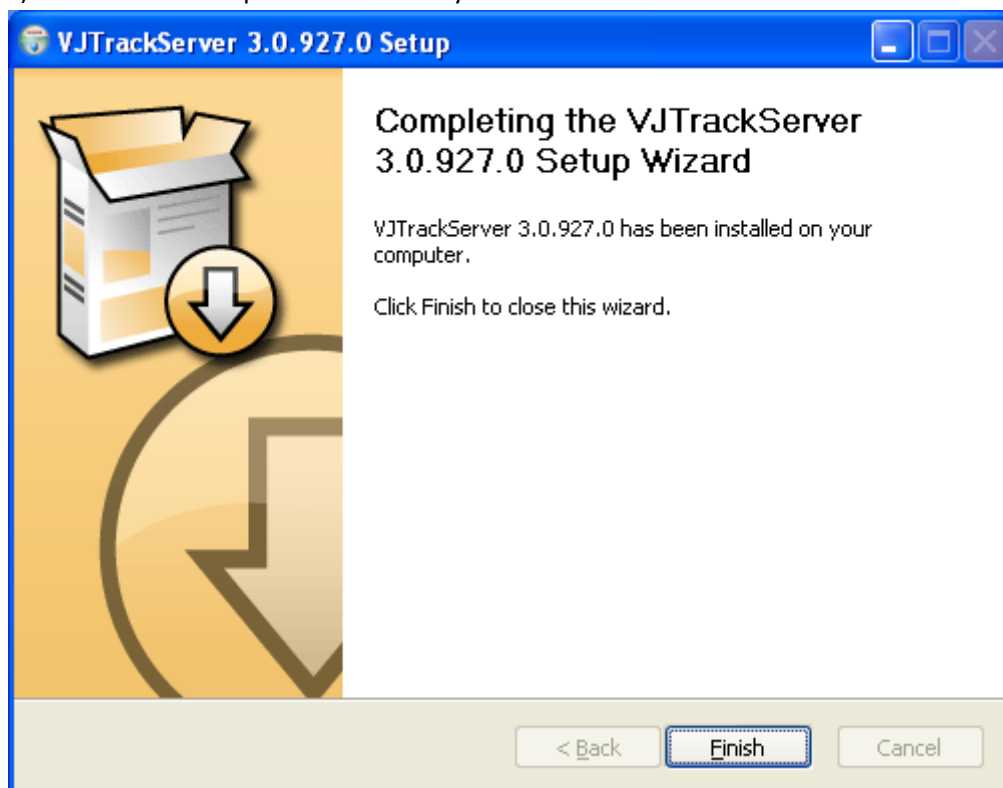
### 3) Start menu



4) Installing



5) Installation completed successfully





## 3. Server

### 3.1 Operating Environment

1) Hardware Environment

Processor: Xeon 4Cores

RAM: 4GB

Hard Disk: At least 500 MB free space

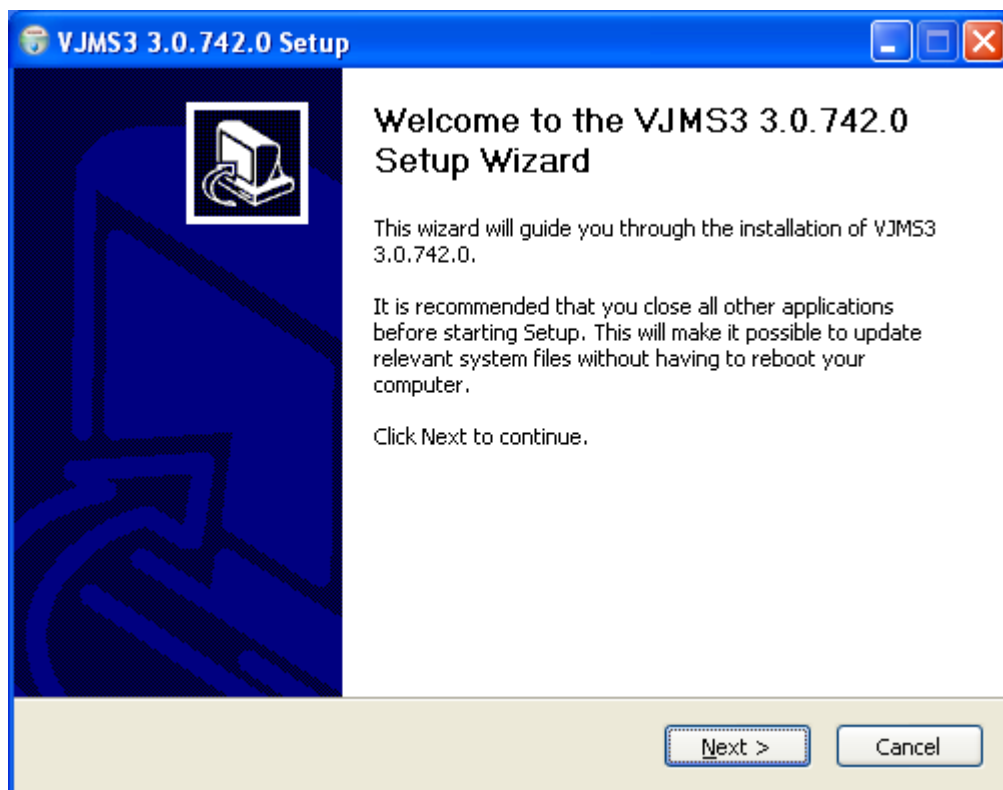
For VOD, consider how much capacity of hard drives according to the number of video files and storage types, we recommended to use the disk array.

2) Software Environment

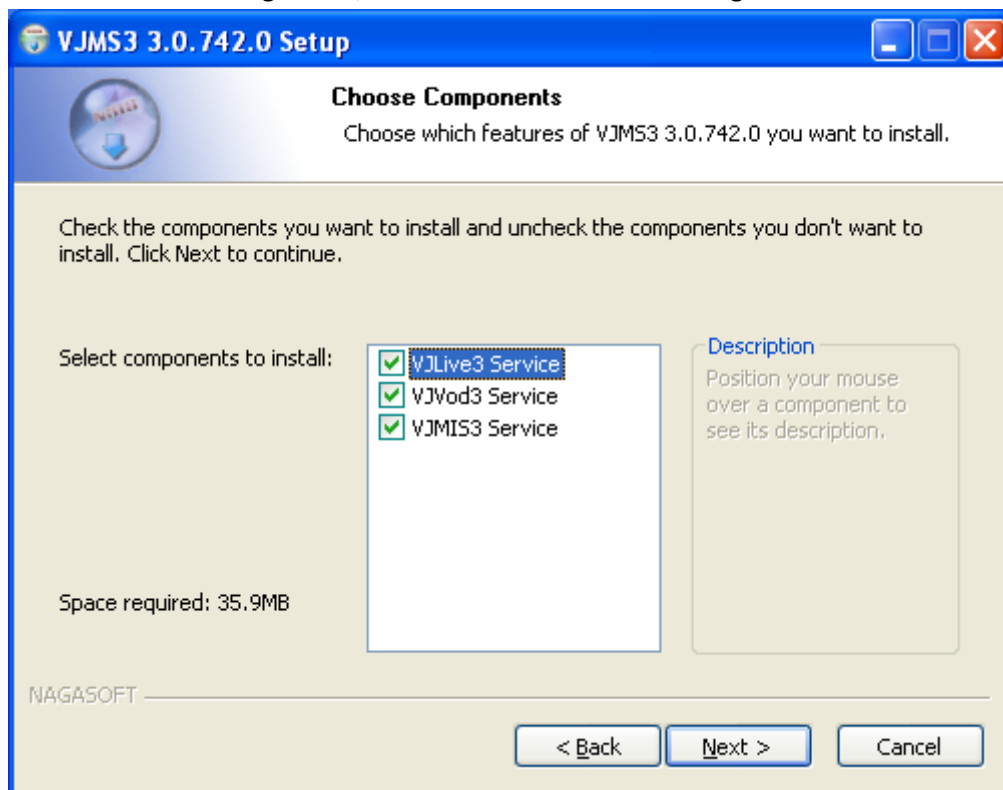
OS: Win2003, Win2008, win2012, 32bits or 64bits

### 3.2 Installation Process

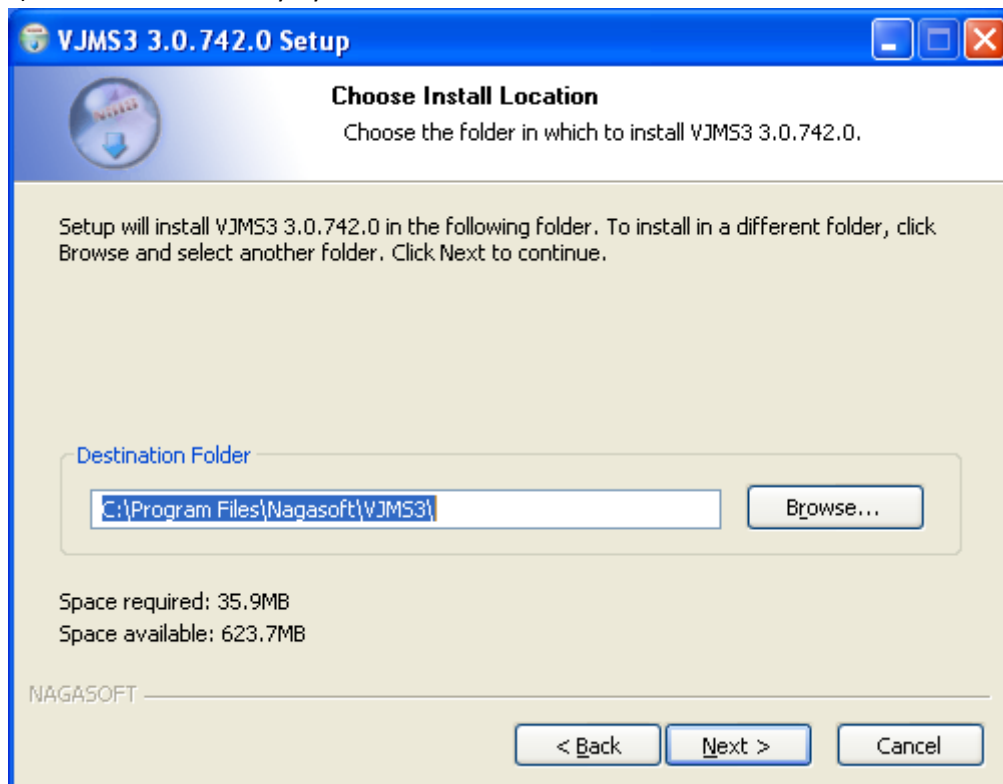
- 1) Unzip the VJMS3 Setup packet, then open "Server" directory, and run VJMS3-en-x64.exe or VJMS3-en-x86. If any popup windows appear or any permission window appears, there is no need to make changes, just click next and next as shown below.



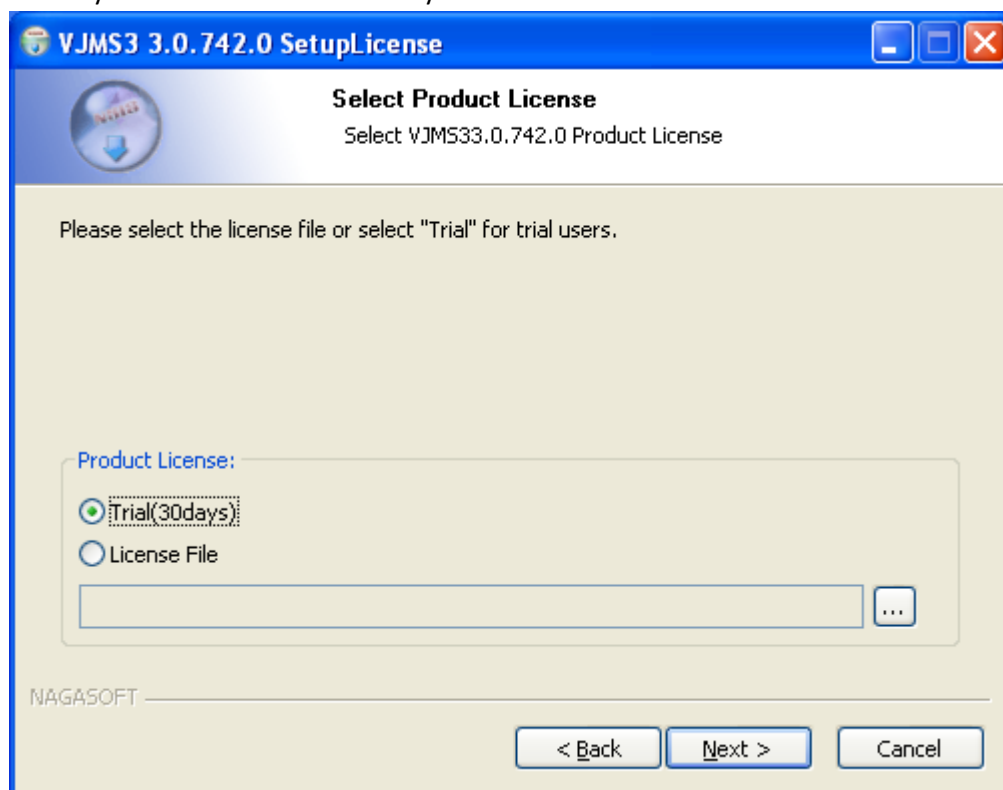
- 2) Select which components you need. VJLive3 is for LIVE Streaming Server; VJVod3 is for VOD Streaming Server, and VJMIS3 is for Media Manager Server.



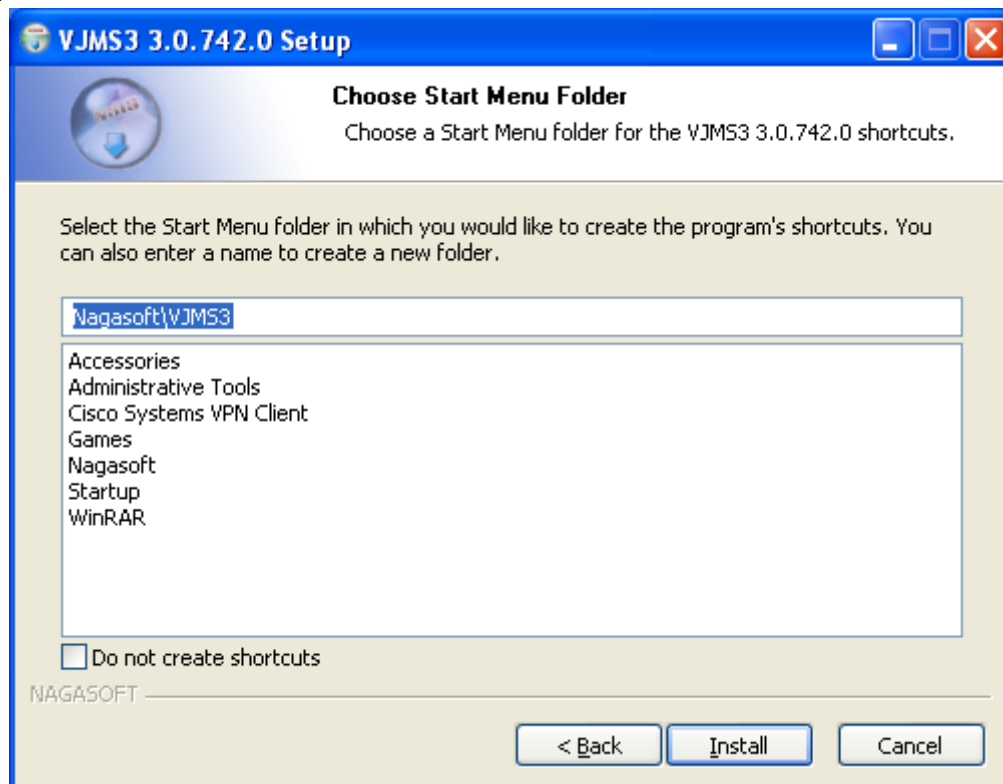
- 3) The install directory by default is C drive.



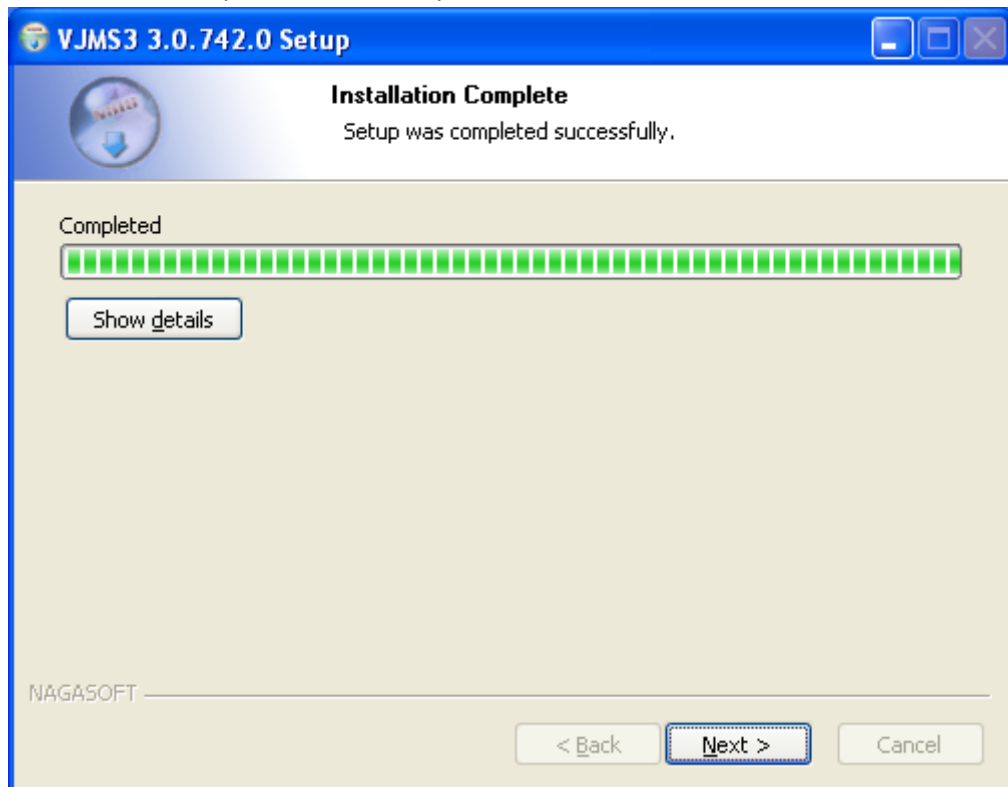
- 4) Setup the license. If you purchased the VJMS3, you'll have license file. Then select license file then browse the computer then select the license file where the license file have to continue the Installation process. Or you want to "Trial" for Trial User, then you can select Trial for 30day.



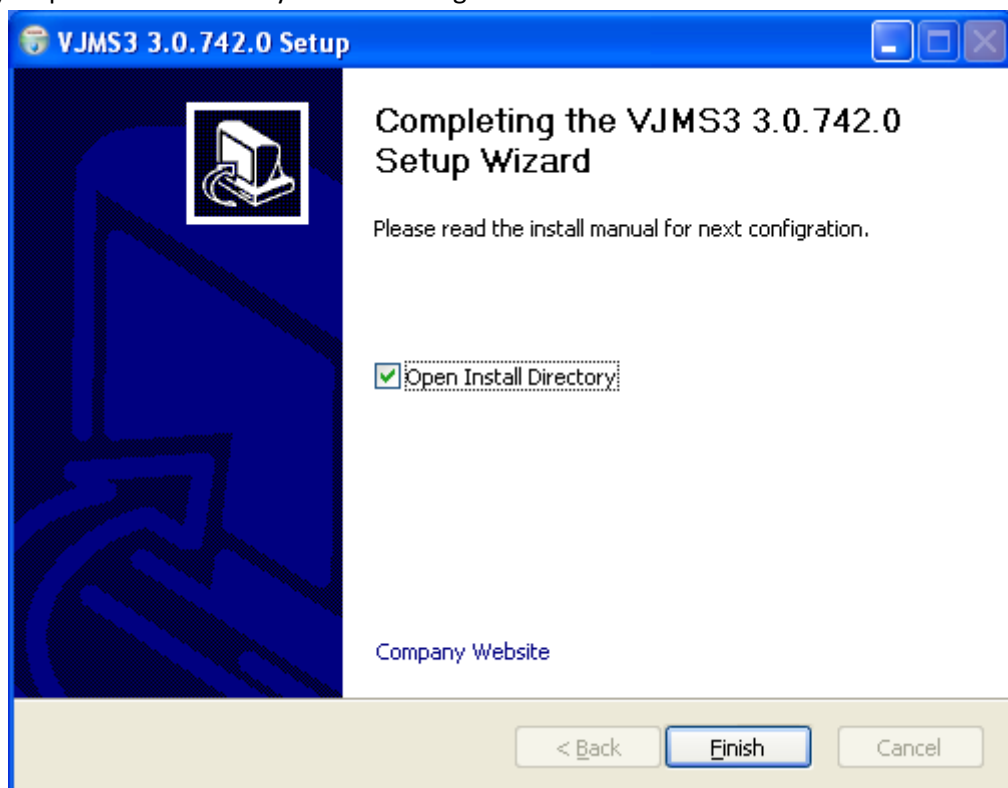
- 5) Start Menu.



6) Installation Completed Successfully.



7) Open Install Directory to Start Configuration.



## 3.3 Configuration

### 3.3.1 VJLIVE Configuration

Open the configuration file, default is C:\Program File\Nagasoftware\JMS3\live\vjlive.cfg.

#### 1) Nat Server and Tracker Server

Note: Test user don not modify these fields, use the default Server (tracker.nagasoftware.cn) for testing.

The Live Trial channel get from default Server can use for 1 day only. If you want to extend the trail channel expiration time then you needs to contact us Marketing department Email:marketing@nagashare.com, to extend the trail channel expiration for any technical assistance you can contact us Email:help@nagashare.com or you can contact us on Skype : bournehlms, nagasoftware\_support.

The purchased user should install the Tracker Server in your server, and then modify these fields.

NatServer=ip:3502

Tracker Server=<http://ip:8500/cgi-bin/live.fcgi>

Replace "ip" to your Server ip or domain address.

#### 2) Listen address

#listen address, format "ip:port," TCP & UDP.

Listen=:5020

#Enable http control protocol, listen port is listen+1 (TCP), mirroring need this service.

EnablehttpSrv=1

#### 3) Run-time log

#Run-time log if you need to generate statistical reports, need to turn this feature.

EnableRuntimeLog=1

RuntimelogDir=c:/vjlive3\_log

#runtime log interval, unit: seconds

StatusLogPeriod=30

#### 4) Media root directory

#Media root directory

#eg: c:/media

MediaRootDir=c:/media

The admin client can get the files and sub-directories list of this root directory.

#### 5) Streaming Push Server

#Enable push server.

Enable=1

#push server listen address, format "ip:port", TCP

Listen=8083

#Enable push protection set allowed user and password in "pushuser.cfg".  
Authorization=0

6) Web Service

#Enable web service interface, manage terminal need this service.  
Enable=1  
#Web service listen address, format "ip:port", TCP.  
Listen=:8091  
#Web service threads numbers.  
ThreadNum=4  
#Access password, we recommended you modify the password after installation,  
Manage terminal access need this password.

### 3.3.2 VJVOD Configuration

Open the configuration file, default is: c:\ProgramFile\Nagasoftware\VJMS3\vod\VJVod.cfg.

1) Nat server and Tracker server

Note: Test user does not modify these fields; use the default server (tracker.nagasoftware.cn) for testing.

VJVOD trial channel get from default server can use for 30 day only. If you want to extend the expiration time you can contact via marketing department

Email:marketing@nagashare.com, to extend the trial channel expiration for any technical assistance you can contact via Email:help@nagashare.com or you can contact us on Skype : bournehl, nagasoftware\_support. Our web link is www.nagashare.com

Note: The purchased user should install the tracker server in your server then modify these fields.

NatServer=ip:3501

TrackerServer=<http://ip:8500/cgi-bin/vod.fcgi>

Replace "ip" to your server ip or domain address.

2) Channel authorization file

#channel authorization file path, for eg: c:\vod.vvc

#when testing don not modifies this field, it will automatically get trial channel for 1day only from tracker server.

#Purchase users must set this path, otherwise the service can't start.

Channelfile=

3) Listen address

#Listen address, format "ip:port", TCP & UDP.

Listen=:5010

#Enable HTTP control protocol, listen port is Listen+1 (TCP), mirroring need this service.

EnableHttpSrv=1

**4) VoD file list**

FileListType=sqlite

FileListUrl=c:\filelist.db

We only support use sqlite database to save the vod file list now.

**5) Run-time log**

#Run-time log, if you need to generate statistical reports, need to turn this feature.

EnableRuntimeLog=1

RuntimeLogDir=c:\VJVod3-log

#Runtime log interval, unit: seconds

StatusLogPeriod=30

**6) Media root directory**

#Media root directory

#eg: c:/media

MediaRootDir=c:\media

The admin client can get the files and sub-directories list of this root directory.

**7) Supported file types**

#supported file types, use, Separated

Support Files=\*.Wmv; \* asf; \* Wma; \* rm; \* rmvb; \* flv; \* mp3; \*mp4; \* mkv; \* avi; \*  
mpg; \*

Vob; \* mov; \* ogg; \* ogm

The admin client get server file list or publish directory will use this as filter.

**8) Web Service**

#Enable web service interface, management terminal need this service.

Enable=1

#web service listen address, format "ip:port"TCP.

Listen=:8094

#Web service threads numbers.

ThreadNum=4

#Access password, we recommended to modify the password after installation,  
Manage terminal access need this password.

### **3.3.3 VJMIS Configuration**

Open the configuration file, default is c:\ProgramFiles\nagasoftware\VJMS3\mis\config.ini

**1) Server**

;Server ID, this field is used in HTTP reporting.

ServerID=1

;Listen ip address, empty for any address.

ListenAddr=  
:Listen port= 5030  
;Thread Numbers.  
ThreadNumber=4  
;Media root directory.  
MediaRootDir=c:\media

The admin client can get the files and sub-directories list of this root directory.  
;Recording root directory.  
RecordRootDir=c:\media\record

The recording task saves files under this directory as default.

- 2) HTTP Report  
;Enable HTTP Report  
EnableReprot=0  
;Report address  
ReportUrl=

Server will report event (Such as upload completed or record completed) to the web by http report. Please refer the VJMIS SDK for more details.

- 3) Web service  
;Enable web service interface, management terminal need this service  
Enable=1  
;web service listen address format "ip:port",TCP  
Port=8093  
;Web service thread numbers.  
ThreadNum=4  
;Access password, we recommended to modify the password after installation,  
manage terminal access.  
Need this password.  
Password=admin

Note: To ensure safety, we recommended you modify the password after installation,  
manage terminal access need this password.

### 3.4 Used Port Table

Product	Port	Type	Description
VJMIS	8093	TCP	WEB SERVICE
	5030	TCP	UPLOAD
VJVOD	8094	TCP	WEB SERVICE
	5010	UDP	P2P PROTOCOL



	5010	TCP	P2P PROTOCOL
	5011	TCP	HTTP CONTROL (P2P PROTOCOL+1)
VJLIVE	8091	TCP	WEB SERVICE
	5020	UDP	P2P PROTOCOL
	5020	TCP	P2P PROTOCOL
	5021	TCP	HTTP CONTROL (P2P PROTOCOL+1)
	8083	TCP	MMS STREAMING PORT
	1935	TCP	RTMP STREAMING PORT
TRACKER	8500	TCP	TRACKER HTTP PORT
	3501	UDP	NAT SERVER FOR VOD
	3502	UDP	NAT SERVER FOR LIVE

## 3.5 Server License

There are two types of license files. They are:

1) Service license

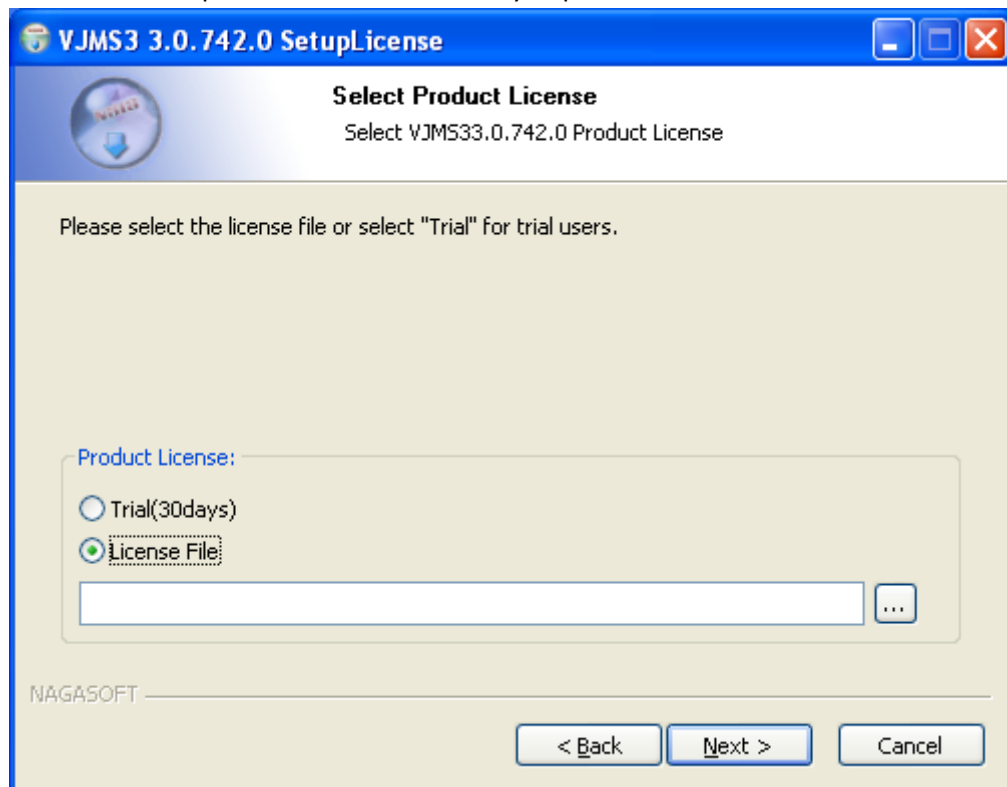
Service license is to start the service and stop the service.

2) Channel license

Channel license is to control the LIVE channels which you create & VOD channel which files you publish.

### 3.5.1 Service License

Service license file use “.nlf” as extension. When you installation process at that time, you need to select the product license file which you purchased.



If service license become expired or invalid, the server service will can't be started, and you can find "invalid license" in the log.txt which located in the install directory.

How to view install service license: click start >All programs>Nagasoftware>VJMS3>License Viewer.

How to install new service license: click start>All programs>Nagasoftware>VJMS3>license installer.

Before we make service license for you, you should provide your server's "HostID" to us. Click "start >All program>Nagasoftware>VJMS3>HostID Generator", then you can find your server's HostID.

### **3.5.2 Channel License**

Channel license file use to "VVC" as extension, we will provide the purchased user one vod channel file with how many vod files you can published and one or more live channels files according to how many live channels you purchased.

## **3.6 Server service Start & Stop**

### **3.6.1 Server Service Start**

Before you start the service, you should complete the configuration for all servers.

There are 3 methods to start the server service. They are

- 1) Click "Start VJMS3" shortcut on the Desktop to start the server service.
- 2) Click "Start->All programs->Nagasoftware->VJMS3->StartVJMS3". Then server service will start.
- 3) Right click on My computer->Manage->Service, then find the following to start the server service
  - "NAGA VJLive Service3"
  - "NAGA VJMIS Service3"
  - "NAGA VJVod service3"

### **3.6.2 Server Service Stop**

There are 3 methods to stop the server service. They are

- 1) Click "Stop VJMS3" on the Desktop. To stop the server service.
- 2) Click "Start->All programs->Nagasoftware->VJMS3->stop VJMS3". Then server service will stop.
- 3) Right click on my computer->Manage->Service. Then find the following to stop the server service.
  - "NAGA VJLive service3"
  - "NAGA VJMIS Service3"
  - "NAGA VJVod Service3"

## 3.7 Bandwidth

### 3.7.1 Live

There is a MDC property for every live channel. When the number of players is less than MDC, all the players will go to connect the server, and the server provides most of the upload bandwidth. When the number of players is larger than MDC, the new start play will can't connect to server, and other players will provide the upload bandwidth for that player.

MDC formula:  $MDC = \text{Server bandwidth} \times 0.09 / \text{streaming Bit rate}$

Server bandwidth must be the bandwidth allocated for that live channel: it may be less than the total bandwidth of server, because the server may have other services such as web, VOD and push streaming.

For Eg: Server bandwidth: 100mb/s, allocate 20mb/s for live channel, streaming Bit rate is 400kbps, so  $MDC = 20 \times 1000 \times 0.9 / 400 = 45$

Note for pushing stream:

- The upload speed of the pushing stream client must be larger than the streaming Bit rate, and must be stable, and it should not share with other computers. For Eg: the max upload speed of ADSL is 512kbps, so the Streaming Bit rate must not be larger than 400kbps.
- The download bandwidth of the push server must be larger than streaming bit rate, and must be stable. If the bandwidth of the live server isn't enough, we recommend you use different servers for pushing stream and live broadcast.

Channel online and bandwidth calculate formula (Theoretical formula)

1) When the stream bit rate is large than the average upload speed of users:

Server bandwidth = (stream bit rate - user average upload bandwidth) \* online, for eg: stream bit rate is 500kbps and average user upload bandwidth is 400kbps, online is 1000. So server bandwidth =  $(500\text{kbps} - 400\text{kbps}) \times 1000 = 100\text{mbps}$ .

2) When the stream bit rate is less than the average upload bandwidth of users:

Server bandwidth = base MDC \* stream bit rate

The larger base MDC is, the more online support and the better stability.

Base MDC and online comparison table (Statistical):

Base MDC	online
<=50	Hundred Scale
100	Thousand Scale
200	Three thousand Scale
500	Ten thousand scale

### 3.7.2 VOD

The player will cache the VOD file in the local user hard disk and provide upload for the other users. So more users you have, more bandwidth saved for your server.

Based on the statistics for the long time running ISP single server with 100mbps bandwidth can afford more than 3000 VOD users.

## 4. VJSAC

### 4.1 Operating Environment

1) Hardware Environment

Processor: Pentium 4

Ram: 128MB

Hard Disk: At least 100MB free Space

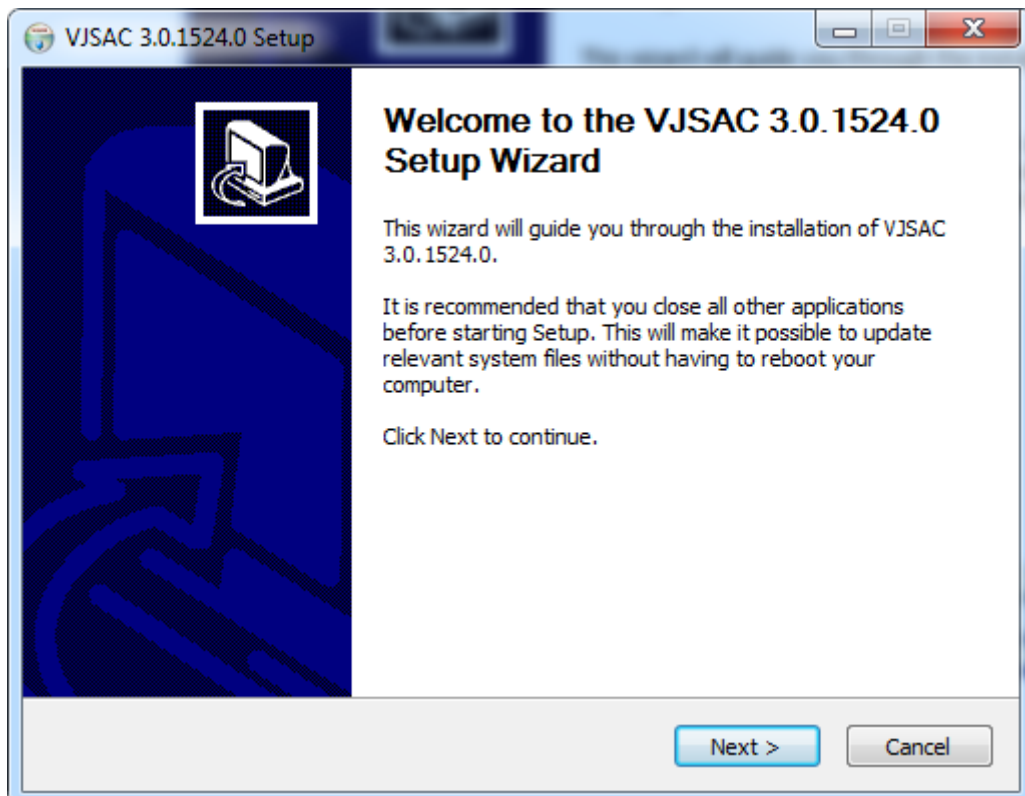
2) Software Environment

Support OS: Win XP, win7, Win8, Win10, Win2003, Win2008

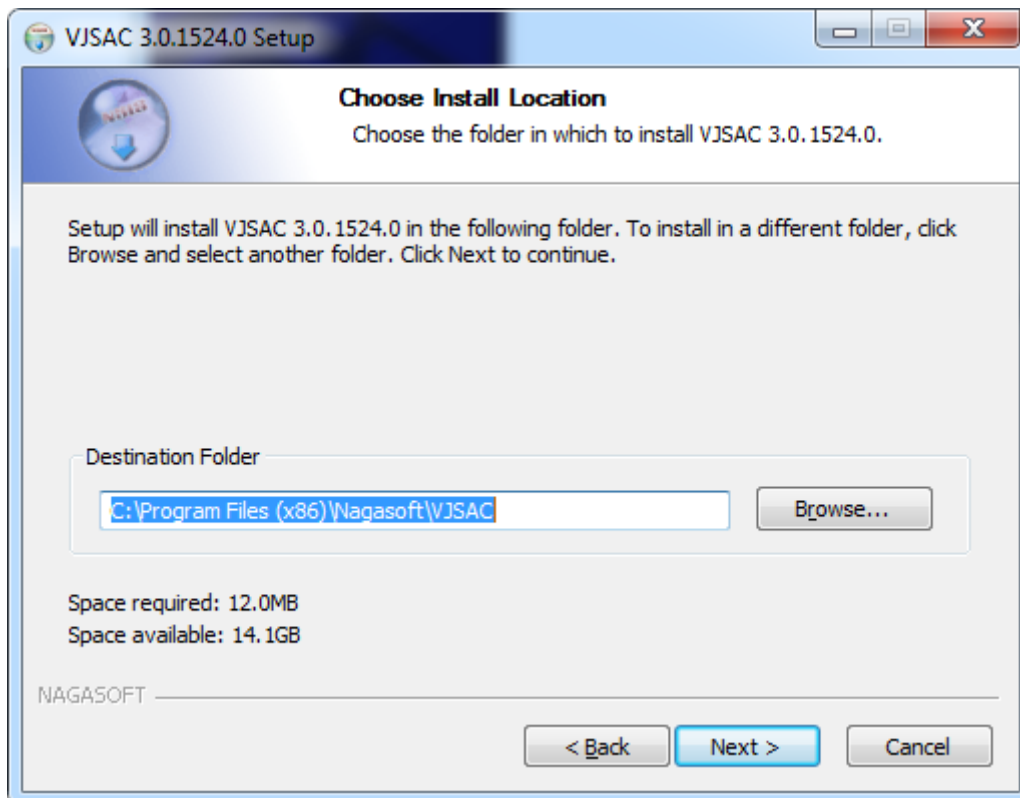
### 4.2 Installation Process

- 1) Find the “admin” folder, double click admin then extract the VJSAC-en-x86.exe. During the installation, if any security windows appear, you don’t need make any changes, just click next and next. As shown below.

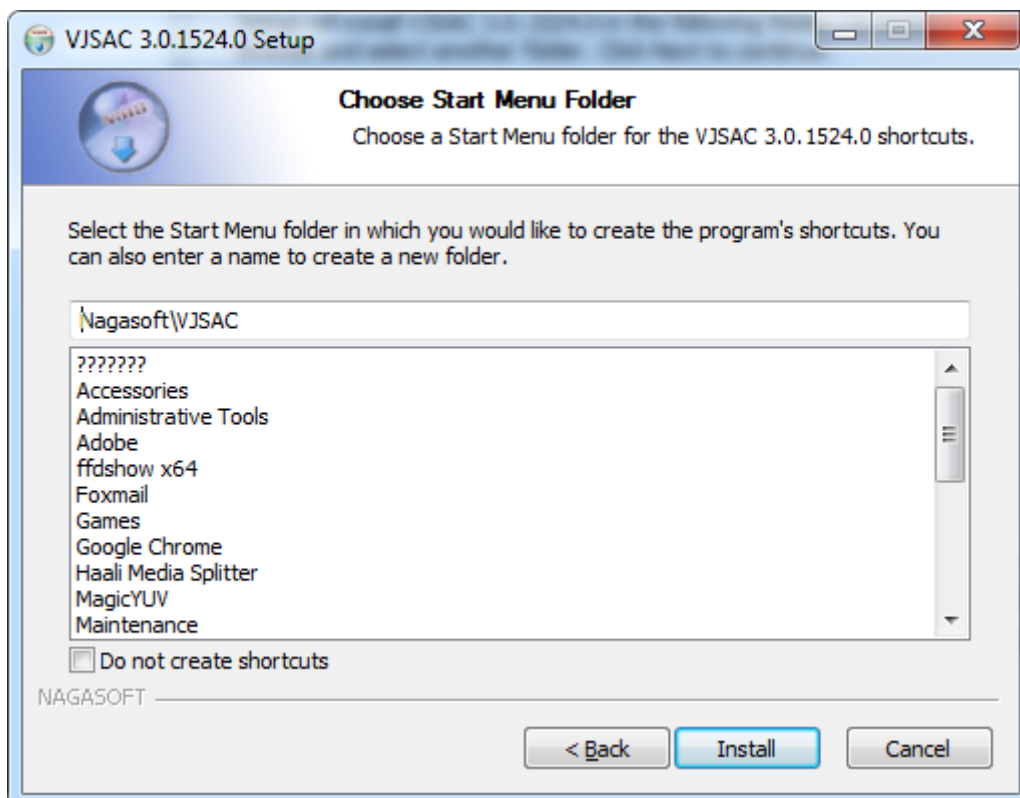
Name	Size	Packed	Type	Modified	CRC32
..			File folder		
admin			File folder		
doc			File folder		
player			File folder		
server			File folder		
changelog.txt	16,358	5,059	Text Document	9/11/2015 9:45 ...	EC2AD895



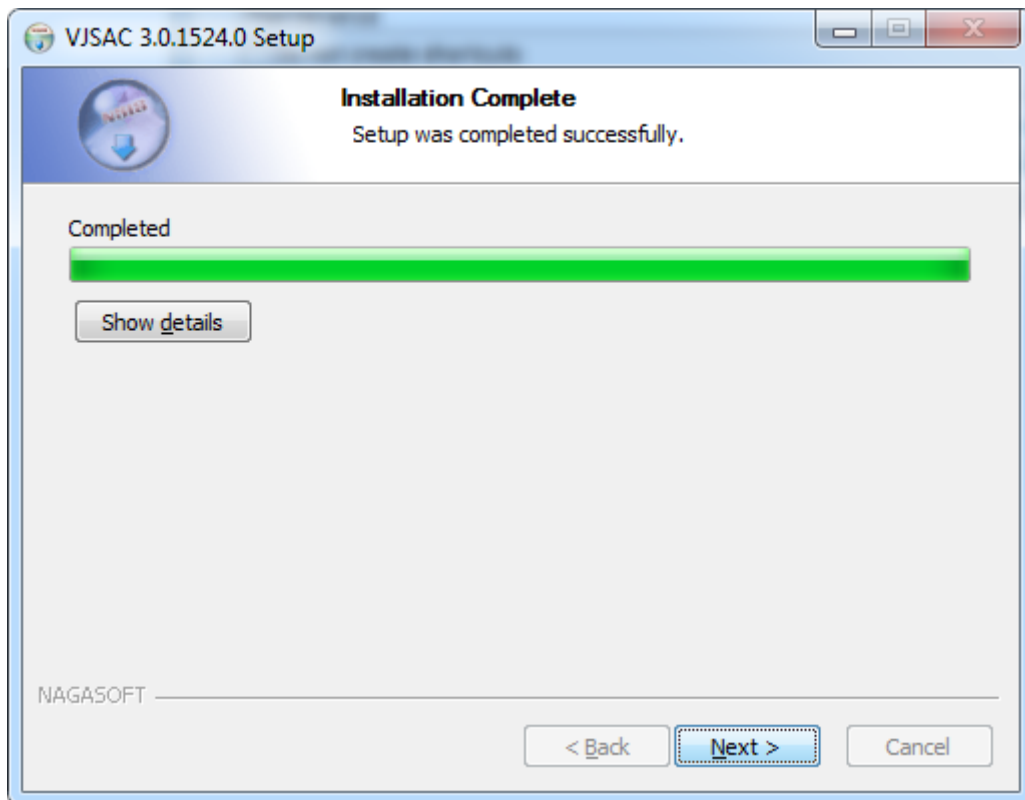
2) Install Directory by default is C:Drive



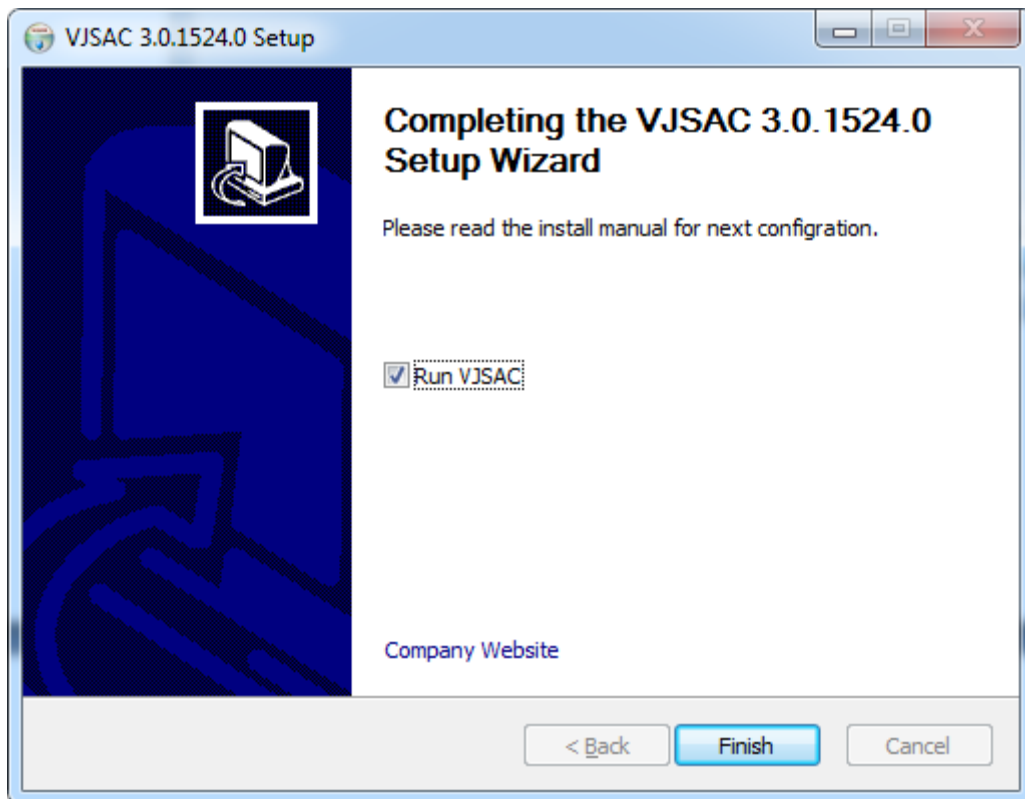
3) Start Menu



4) Setup Completed Successfully



5) Completed Installation



Check "Run VJSAC", then you can run the admin client.

## 4.3 VJSAC Configuration

### 4.3.1 Add a Server

- 1) Click "Server" to select "Add" or right click "Server List" to select "Add" in the popup menu.
- 2) Input the server name such as "Server1" or you can input any name.
- 3) Input the server address, IP address or domain name, such as 192.168.0.100 or nagasoft.cn.  
Note: Please refer to the VJLive.cfg configuration.
- 4) Input the port and password for VJLIVE service. The default server port is 8091 and the default password is admin.  
Note: Please refer to the VJLive.cfg configuration.
- 5) Input the port and password for VJVOD Service. The default server port is 8094 and the default password is admin.  
Note: Please refer to the VJVod.cfg configuration.
- 6) Input the port and password for VJMIS service. The default server port is 8093 and the default password is admin.  
Note: Please refer the config.ini configuration.
- 7) After finished, click "Test Connect" button to connect the server. It will show you connect success window. If unable to connect to server, then check the configuration settings correct or not.

The screenshot shows the 'Add Server' dialog box. It contains the following fields and controls:

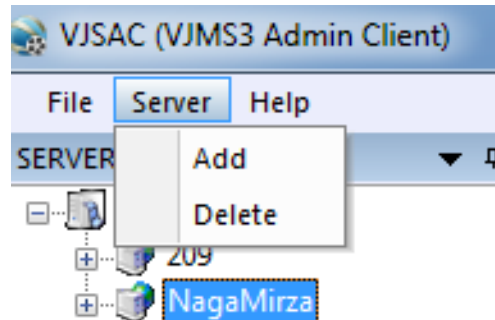
- Server Property:**
  - ServerName:
  - ServerAddress:  IP or Domain
- Service Property:**

	Port	Password	
<input checked="" type="checkbox"/> VJLive Service	<input type="text" value="8091"/>	<input type="password" value="....."/>	<input type="button" value="Test Connect"/>
<input checked="" type="checkbox"/> VJVod Service	<input type="text" value="8094"/>	<input type="password" value="....."/>	<input type="button" value="Test Connect"/>
<input checked="" type="checkbox"/> VJMis Service	<input type="text" value="8093"/>	<input type="password" value="....."/>	<input type="button" value="Test Connect"/>
- Buttons:** OK, Cancel

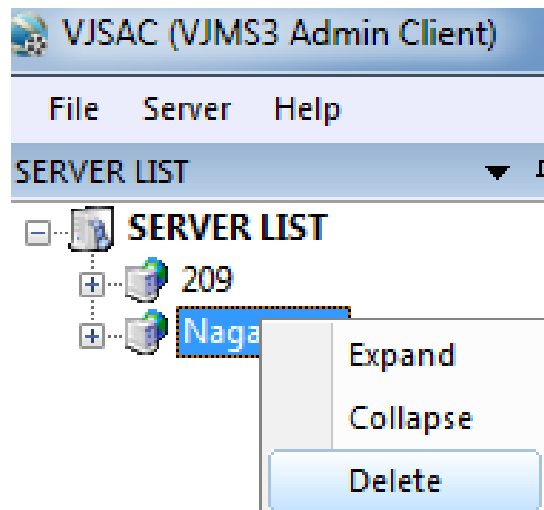
### 4.3.2 Delete Server

There are 2 ways to delete the server from the server list.

- 1) Select a server in the server list. Then click "Server" to select "Delete". The server will be deleted completely from the server list. Shown as below.



- 2) Right click a server on the server list, and then select "Delete". The server will be deleted completely from the server list. Shown as below.



## 4.4 Server Information

On VJSAC, you can change server name and server address, or view VJLIVE information and VJVOD information.






- 1) VJLIVE service information includes the index server address, server version, the media root directory, user ID, user name and license file installation date and used days, host ID and description.
- 2) VJVOD service information includes the index server address, server version, the media root directory, user ID, user name and license file installation date and used days, host ID and description.
- 3) VJMIS service information includes server ID, upload port, record root directory, media root directory, user ID, user name, install time, used days, host ID and description.



## 5. VJLive Usages

Click “VJLive” from a server. Then you can do operation for this.

### 5.1 Channel List

Channel List    Heartbeat    IP Rule    Domain Rule    Push Protection    Monitoring    Runtime Log				
 Add Source Channel  Add Mirror Channel  Delete  Start  Stop				
ID	Name	Status	Type	
35374	c01	Started	Source	
35375	c02	Started	Source	
35376	c03	Started	Source	
35377	c04	Started	Source	
35378	c05	Started	Source	

#### 1) Add Source Channel

Channel Name: we recommend input numbers or letters in order to push the stream.

Note: it only supports numbers or letters. If there are any symbols including space, it cannot receive the stream. The name must be unique.

MDC (Max directly connections)  $MDC = \text{Server bandwidth} * 0.9 / \text{Streaming bit rate}$ .

Buffer: Buffer data is default by 60 seconds; the server will buffer the data in memory.

Channel file: if you have purchased, please use the channel file which you purchased from us. Otherwise, please check the “Get Trial Channel” for a trial channel, it will be expired after one day. If you need more time, please contacts us via Email: [help@nagashare.com](mailto:help@nagashare.com) . For any technical assistance you can contact us on Skype: bournehlm, nagasoft\_support.

Push stream first: if you have check this playlist, it will automatically switch the new push streaming when there is a new push stream.

Allow Mirror: If you have checked it, you can create a mirror channel for source channel in other LIVE server.

Create Source Channel

Source Channel Property

Channel Name: c01

Note: Only support numbers and letters

Max Direct Connect: 100

formula:  $MDC = \text{Server bandwidth} * 0.9 / \text{bitrate}$

Buffer: 60

seconds

Channel File: D:\17F26ACF9AAC945988A24FECA76

Browse

☐ Get Trial Channel(T)  
(Period: 1 day)

☒ Allow Mirror

☒ Push Stream First

OK

Cancel

## 2) Add Mirror Channel

Channel name: We recommend input numbers or letters or not be existing channel name including the source channel and mirror channel.

Source Channel ID: it must be above the other server source channel.

MDC (Max directly connections) :  $MDC = \text{Server bandwidth} * 0.9 / \text{Streaming bit rate}$ .

Buffer: default by 60 seconds; the server will buffer the data in memory.

Allow Mirror: If you have checked it, you can create a mirror channel for this channel in other LIVE server.

Source Peer:

- Auto Get from Tracker: Automatically obtain another source node or nodes of the channel from the Mirror on the index server.
- Manually specify: manually specifying the source node of the channel or other mirror node. 4 source address are supported. Use signal "|" to separate, and each format is ip/domain:5021.. IP: input the source node or other mirror node server ip or domain name. Port: HTTP Control protocol port is by default is 5021.

**Create Mirror Channel**

Mirror Channel Property

Mirror Channel Name:  Note: Only support numbers and letters

Source Channel ID:  Must be source channel in other server

Max Direct Connect:  formula:  $MDC = \text{Server bandwidth} * 0.9 / \text{bitrate}$

Buffer:  seconds

Source Peer

☐ Auto get from tracker ☒ Manually specify

Address list:

☒ Allow Mirror

OK Cancel

	IP/Domain:	Prot:
Source 1:	192.168.0.208	5021
Source 2:		
Source 3:		
Source 4:		

Ok Clear all

### 3) Delete Channel

Select the channels which you want to delete in the channel list. Then click “Delete” , the channel will be deleted from channel list completely.

### 4) Start Channel

Select the channel which you want to start from channel list. Then Click “Start”, the channel will start to broadcast.

### 5) Stop Channel

Select the channel which you want to stop from channel list. Then click “Stop” that channel will going to stop broadcast.

## 5.2 Heartbeat Settings

Heartbeat function regularly request for a web server to notify the existence of web services, or send UDP packet to UDP server. It is used for count or monitor. The data format is shown below: ( Use POST for web server request, and UDP data is inserted in one or more UDP packet)

[local\_ip=]&[onlines=]&[channel\_count=]&[upload\_speed=]&[channel\_data=(localID, channel name, online number, MDC, CDC, upload speed, download speed, packet lost, packet delay, mirror source list, mirror source address) (...)] (...)]

Channel List	Heartbeat	IP Rule	Domain Rule	Push Protection	Monitoring	Network Disk Map	Runtime Log
--------------	-----------	---------	-------------	-----------------	------------	------------------	-------------

Heartbeat Parameter

Server: 

Web server address or udp server address, such as:  
Web server address: http://www.xxx.com/report.jsp  
Udp server address: udp://xxx.com:1234

Local ID: 
Period:(sec)  ☒ Autorun
☒ Local ID ☒ Onlines
☒ Upload Speed ☒ Channel Counts ☒ Channel Data

local\_ip=12.168.0.31&onlines=&channel\_count=&upload\_speed=&channel\_data=

Apply

Heartbeat server: Use to receive HTTP POST report or UDP packet. Operators need to develop a web page on their own and change the page address in to here. Operators can be timed to get to the service performance parameters reported in this web page.

Local Id: you can enter any content, generally using the ip address in used to distinguish which server to send requests to the web. For example: 192.168.0.31.

Heartbeat period: the interval time of server request. It is 60 seconds by default.

Auto run: Timed report by automatic. If don't check, it stop timed report.

Preferences: Select the desired parameter provided to the web. There is a local ip, the number of online users current, upload speed, the total numbers of channels, channel data.

Upload Speed: Unit Kb/S.

Channel data format: channel ID, channel name, online, MDC, CDC, Upload Speed

MDC: The maximum number of directly connected.

CDC: Current Direct connect number

Upload speed: unit KB/s.

After the above parameters are entered, click "settings" for heartbeat settings to take effect.

Note: Each parameter set after the change heartbeat should click "settings" to make your changes.

## 5.3 IP Rule (Service)

IP rules are used for p2p / HTTP / RTMP protocol visitors ip filtering. Ip list of rules from top the bottom sequential search, find qualified ip segment rule terminate immediately find and return the ip rules to allow / prohibit result. If the conditions of the rule they meet is not found, it will return prohibited. Filter radio protocol can also be multiple choices.

IP channel rule includes channel-level and service-level, the former higher priority. First search for a matching channel-level rules, find a matching item to return the rule results. If not found, search service-level rules.

Enable IP rules (service level) only need to check “Enable” and then click “Submit”. Uncheck “Enable” then click “Submit” was not enabled ip rules (service level).

Note: After the server enabled ip rules, as long as visitors do not find the corresponding Ip rules, the default block access to all protocols. If you want to remove this limitation, you can add a list of the last face “Allow all ip access to all protocols” rule in the service class Ip rules. As shown below

Start IP	End IP	Allow	Protocols
192.168.0.19	192.168.0.19	Yes	P2P RTMP
192.168.0.1	192.168.0.30	No	P2P HTTP RTMP
192.168.0.32	192.168.0.32	Yes	P2P HTTP
192.168.0.1	192.168.1.1	No	RTMP
121.9.204.103	121.9.205.103	No	HTTP RTMP
0.0.0.0	255.255.255.255	Yes	P2P HTTP RTMP

Allow all Ip access to all protocols.

#### IP Rules List Management:

- 1) click “Add” to add a IP rule.

Begin IP: Begin IP to be filtered IP Segment.

End IP: End IP to be filtered IP segment. If you want to filter a IP, the endip keeps the same with the begin IP.

Allow: it will allow filtering of IP access to the appropriate the protocol.

Protocol: The agreement needs to be filtered; there is P2P, HTTP, RTMP three protocols for single or multiple choices.

New IP Rule

Begin IP: 192 . 168 . 0 . 1

End IP: 192 . 168 . 0 . 11

Allow: Yes

Protocol: ☒ P2P ☒ HTTP ☒ RTMP

Ok Cancel

## 2) Modify

Select IP rule list rule, then left-click IP rules list below the “Edit” for that rule to be modified. If you want to change the location of that rule, you can adjust by ip rules list to the right of the “up” and “down”.

## 3) Delete

Select IP rule, then left click IP rule list below the “Delete” to delete that rule. It will be deleted from the list.

## 4) Submit

Every check / uncheck “Enable” or a list of IP rules to add, modify delete and other operations after adjusting the position you must left-click IP rule list below the “submit” to submit the results of the operation to the server.

## 5) Refresh

Pre click “Submit” you can left click IP rule list below the “Refresh” if verified result of the operation has been submitted to the server.

# 5.4 Domain Rules (Service)

Domain name rules are used for P2P / HTTP/RTMP protocol to access web page address filtering. Domain name order to find a list of rules from top to bottom to find qualified domain name lookup rule immediately terminate and returns the domain name rule enable/ disable result. If they meet the conditions of the rule is not found return prohibited. Filter radio protocol can also be multiple choices.

Domain name rules sub channel level and service level two the former is high priority. Search match first channel-level rules, find matching items returned rules result if not found, then the search service level rules.

Domain –Name Matching Algorithms:

Given access to the web page address (for Example: <http://abacom/yyy/zzz.jsp>), extract the domain name (Eg: a.b.com), protocol header http:// and the first ‘/’ between, and remove the port. According to this rule Domain name search list matching right to let character comparisons are not case sensitive. Eg:

Domain Name	Domain Name Ruler	Match
a.b.com	b.com	Matching
b.com	a.b.com	Not Match

Enable domain rules (server) only need to check the rules on the right domain name “Enable” and then left-click the domain name rule list below “submit”. Uncheck “Enable” then click “Submit” was not enabled Domain name Rules (service level).

Note: After the service level domain rules are enabled as long as visitors do not find the appropriate domain name rules, default block access to all protocols. If you want to remove this limitation, you can list the service level domain name rules rearmost add a domain names all protocols allow all rules as shown below:

Channel List	Heartbeat	IP Rule	Domain Rule	Push Protection	Monitoring	Runtime Log
--------------	-----------	---------	-------------	-----------------	------------	-------------

☒ Enable

Domain	Allow	Protocols
www.nagasoftware.cn	No	RTMP
nagasoftware.cn	Yes	P2P HTTP RTMP
*	Yes	P2P HTTP RTMP

Allow all domain names to all protocols

#### Domain Rule List Management:

##### 1) Add

Click domain name rule list below the "Add"

Domain Name: Domain name needs to be filtered. Enter symbol "\*" indicates all domain names.

Allowed: It will allow to filtering of domain names corresponding protocol.

Agreement: The agreement needs to be filtered, there is P2P, HTTP, RTMP three protocols to choose from can be single or multiple choice.

New Domain Rule

Domain: www.nagashare.com

Allow: Yes

Protocol: ☒ P2P ☒ HTTP ☒ RTMP

OK

Cancel

##### 2) Modify

Select a rule in the rule list of the domain names, and then left click the domain name under the list of rules "Modify" to modify the rule. If you want to change the location of the rule, you can use domain name rules list to the right of "up" and "down" to adjust.

##### 3) Delete

Select a rule in the rule list of the domain names, and then left click IP bottom of the

list of the rules delete option to the rule.

#### 4) Submit

Every time you check/uncheck the “Enable”, or list of domain name to add modify, delete, adjust the position after the operation, you must left click the domain name under the list of rules “submit” to present to results of the operations to the server.

#### 5) Refresh

Each time you click “Submit” how you can left click the domain name under the list of rules “Refresh” to the list of the rules it will be refresh. After Verify the operating results have been submitted to the server.

## 5.5 Push Protection

Push protection is used to verify the user identity, preventing malicious pushing stream to server and using server resource.

Enabled this function is different from IP rules and domain rules, you only need to check “Enable Push Protection” without click the other button. Uncheck “Enabled Push Protection” means to disable push protection.

User Name	Allow Channels
admin	
guest	c05
nagasoft	c01,c02
test	c03,c04

Manage the list of user:

#### 1) Add

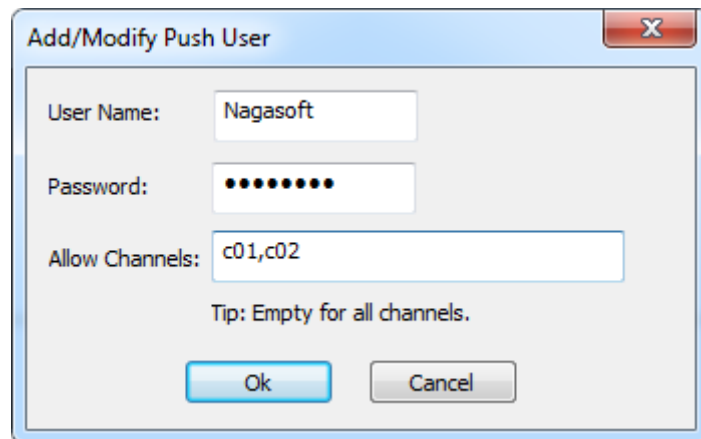
Click “Add” to add a user into push protection.

User Name: User name for push protection.

Password: Password for push protection.

Allow Channels: Allow this user to push stream to live channels. If you set empty, this user can push stream for all channels.



A screenshot of a Windows-style dialog box titled "Add/Modify Push User". It has a standard title bar with a close button (X). The dialog contains three text input fields: "User Name:" with the value "Nagasoftware", "Password:" with masked characters (dots), and "Allow Channels:" with the value "c01,c02". Below the fields is a tip: "Tip: Empty for all channels." At the bottom are "Ok" and "Cancel" buttons.

Add/Modify Push User

User Name: Nagasoftware

Password: .....

Allow Channels: c01,c02

Tip: Empty for all channels.

Ok Cancel

## 2) Modify

Select a message in the users list and then left click "Modify" to modify the message. If not change the password, you don't need enter the password again.

## 3) Delete

Select a message in the user list and then left click "Delete" to delete the message. It will be deleted from the list of users.

## 4) Refresh

Each time to add, modify or delete a message, you can click "Refresh" to verify the operating results whether are submitted to the server.

Note: All action in push protection takes effects immediately without click the other button, so the operation should be done caution.

# 5.6 Monitoring (Service)

Here you can monitor online number, total source channels, total mirror channels, server star time, server running time, upload speed, total upload flow, download speed, total download flow, CPU usage and memory usage.

Click "Refresh" button to refresh data by manual each time. Or you can automatic refresh by selecting refresh time. You can set 1 second, 3 seconds, 5 seconds, 8 seconds or 10 seconds as the refresh interval.

Channel ListHeartbeatIP RuleDomain RulePush ProtectionMonitoringRuntime Log

VJLive Service

1 second

Onlines:

5

Total Source Channels:

5

Total Mirror Channels:

0

Start Time:

2011-10-09 14:33:55

Started:

0 day, 02:15:12

Upload Speed:

0.00 kb/s

Total Upload:

0.00MB

Download Speed:

0.00 kb/s

Total Download:

0.00MB

CPU Usage:

02%

Memory Usage:

08MB

Refresh

## 5.7 Runtime Log (Service)

Through access log and status log, you can understand the access situation of broadcast servers, IP rule, domain rule and others, also the status of online numbers, upload speed, memory usage and others. These logs can be exported to generate access and status charts. You can specify a data range for query, such as one day or one month. But the span for the data range for query should not be too large and the log should not be frequently queried. We recommend to query in the case of small number of users, otherwise it may affect the performance and reliability of service. The format details are shown in Appendix III: Server Log Format.

Channel List	Heartbeat	IP Rule	Domain Rule	Push Protection	Monitoring	Runtime Log
--------------	-----------	---------	-------------	-----------------	------------	-------------

Log:	Access	Type:	Play	Start Time:	9/28/2011	End Time:	9/28/2011
------	--------	-------	------	-------------	-----------	-----------	-----------

Download	Export	Delete	Query
----------	--------	--------	-------

Date	Time	Protocols	PeerId	IP Address	Channel ID	Channel Name
2011-09-28	18:40:10	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	18:40:11	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	18:40:12	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	18:50:39	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	18:50:39	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	18:55:45	HTTP	192.168.0.37	192.168.0.37	35065	c06
2011-09-28	19:00:55	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:00:56	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:06:20	P2P	000C29F2AB97@5459JBO	192.168.0.33	35065	c06
2011-09-28	19:06:50	P2P	000C29F2AB97@5554EAM	192.168.0.33	35065	c06
2011-09-28	19:06:56	P2P	000C29F2AB97@5573XE5	192.168.0.33	35065	c06
2011-09-28	19:07:01	P2P	000C29F2AB97@5589ODK	192.168.0.33	35065	c06
2011-09-28	19:11:57	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:11:58	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:22:27	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:22:28	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:32:34	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:32:35	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:42:40	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:42:41	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:52:50	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	19:52:51	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:02:58	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:02:59	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:13:06	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:13:07	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:23:13	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:23:14	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:33:20	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:33:21	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:43:33	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:43:34	RTMP	192.168.0.19	192.168.0.19	34865	c01
2011-09-28	20:54:33	RTMP	192.168.0.19	192.168.0.19	34865	c01

#### Runtime log management:

All parameters must be chosen before management, or it will affect the next operation.

Four parameters must be chosen, namely Logs, Type, Start time and End time.

Logs: logs of management There are two types ,namely access log and status log.

Types: There are five types namely play, close, IP rule, domain rule and push for access log. And there is empty for status log. Start time: specifies a date range for log management at start time.

End time: specify a date range for log management at end time. Note: end time must be greater than start time, otherwise there is empty for log.

Note: End time must be greater than the start time or the log is empty. After all parameters are selected you can log the following.

#### 1) Download

The log files are stored in the log directory of VJLIVE server installation directory. click "Download" to download the log files within the date range on the server to the local, and integrate in to the local log cache files. The log files id default to download in the directory of "\\AppData\\Roaming\\Nagasoftware\\VJSAC\\Log".

#### 2) Export log

Click" Export" and choose a directory for the export log file, then click "Save " to save as TXT file.

#### 3) Delete log

Click "Delete" to delete the log in queries list and local cache.

#### 4) Query log

Click Query to download log specified a data time form sever, and then the logs are shown on the list. If there are not local log cache files, it will generate the log cache to

the directory of “\AppData\Roaming\Nagasoftware\VJSAC\Log”.

## 5.8 Playlist

Select the channel and then click playlist, you can add file/URL to the playlist.

Note: You must click “Save” button to set to server after you complete modify the playlist, otherwise modify will discard.

Channel: c01 Currently Playing: rtmp://192.168.0.19:10493 00:00:23/00:00:00



(Note: Use Add/Delete/Up/Down to modify the playlist, then click "Save" set to server)

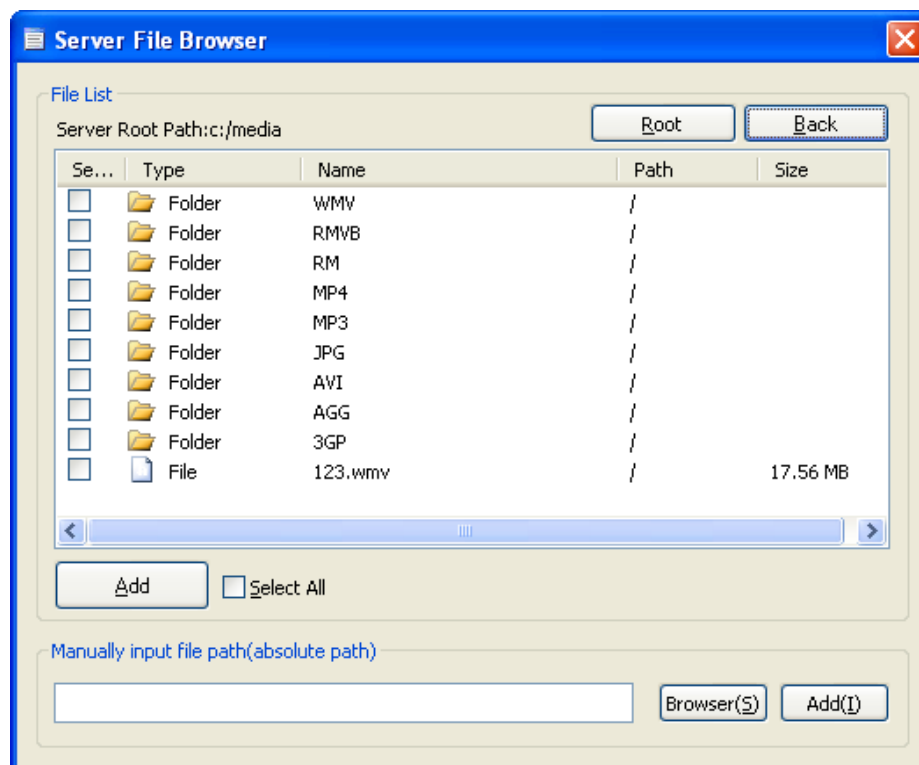
### 1) Add File

Supported file format: wmv/\*.asf/\*.wma/\*.flv/\*.mp3/\*.rmvb/\*.rm.

Click “Add File” button, then you can browser the files on the media root directory. Refer to 3.3.1 VJLIVE Configuration for the root directory setting. Select the files you want in the Server File Browser dialog, and then click “Add” button to add to playlist.

You can input absolute file path where you want to add file to the playlist. Fill the absolute path by manual or click “Browser” button to get its path, and then click “Add” button, the file will be added in.

Please remember to click “Save” button to make selection valid.



### 2) Add URL

Click “Add URL” ,and you can see the “Add URL” dialog, you should input the name and URL.Click Add, it will be added to the playlist.

Get stream from Windows Media Encoder(WME). There are two types namely the MMS protocol and the HTTP protocol for WME encoder. choose MMS:// for MMS protocol in the URL link in the drop down box and then fill the WME addresses and port, for Eg: 192.168.0.100:8080. Choose MMSH:// in the URL link for HTTP protocol in the drop down box and fill the WME addresses and port, for Eg:192.168.0.100:8080.

Get streams from Windows Media Service stream(WMS). There are two types namely MMS protocol and the HTTP protocol for WMS. choose MMS:// for MMS protocol in the URL link in the drop down box and then fill the address,for Eg:192.168.0.100/live. choose MMSH:// for HTTP protocol in the URL link in the drop down box and fill the address for Eg:192.168.0.100:8880.

Get HTTP TS stream. Support getting ts stream from VLC or hardware ts stream encoder. Select “Hts://” in the drop-down box, and write down the stream address from VLC or encoder, for Eg “192.168.0.100:8880”.

Get RTMP stream from RED5, Flash media server or VJLive. Choose rtmp:// in the drop down box and write down the stream address and stream name for Eg: “192.168.0.32/live&mediaName=c01. The full RTMP stream format VJLIVE is “rtmp://ip[:port][appName]&mediaName=streamName”.

Support UDP TS stream for unicast or multicast. UDP unicast supports single pushing UDP stream, and UDP multicast supports multicast and multi-receiving. Choose “udp://” in the drop-down box and write down the unicast or multicast address and port, for Eg: multicast address and port :“234.0.0.123:1234”, for Eg: unicast address and port:”:1234”(Ignoring IP for unicast means to receive all IP).

Please remember to click “Save” to make selection valid after click “Add”.

**Add URL**

URL Property

Name:  
rtmp

URL:  
rtmp:// 192.168.0.19/live&mediaName=c01

Support Type:  
mms: Pull stream from WME or WMS(mms protocol).  
mmsh: Pull stream from WME or WMS(http protocol).  
HTTP TS: Pull stream from VLC or TS hardware encoder(http protocol).  
udp: Support UDP TS unicast or multicast  
rtmp: Pull stream from FMS/VJLive

Add Back

### 3) Save

After you modified the playlist, you should click Save to commit to the server.

#### 4) Delete

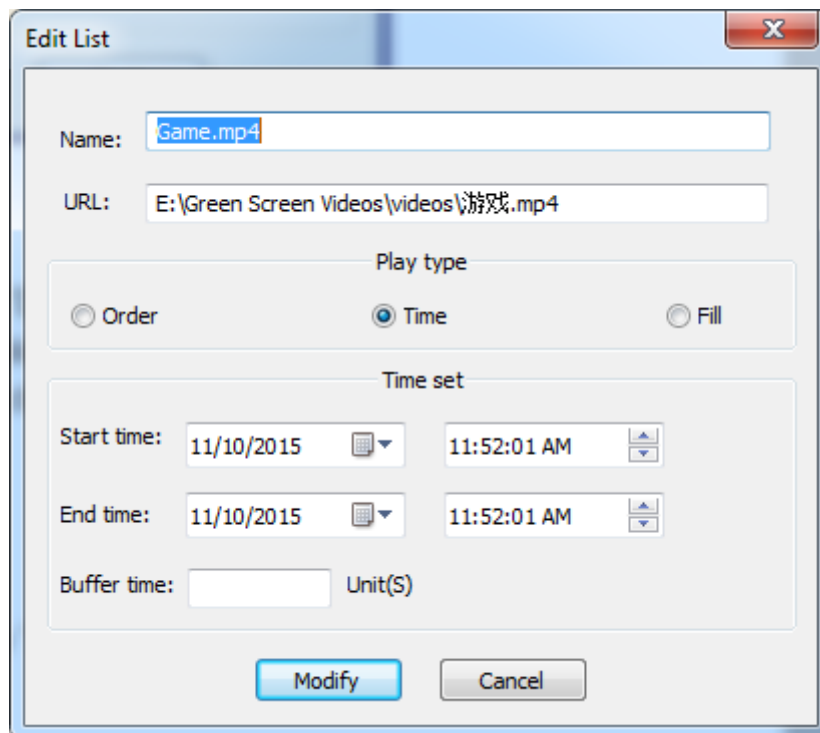
Delete if you want to delete any file from the playlist..

#### 5) Jump To

Select one item in the playlist and then click “Jump To”, the channel will jump to that item and the live system will directly broadcast this program.

#### 6) Edit

Edit which file you want to edit. Select the file from playlist and then click “Edit”, in that you can change the file name and play type. There are three types, namely Order, Time, Fill. If you select the “Order”, it will work on Order. If you select the “Time”, then you need to set the start time and end time.

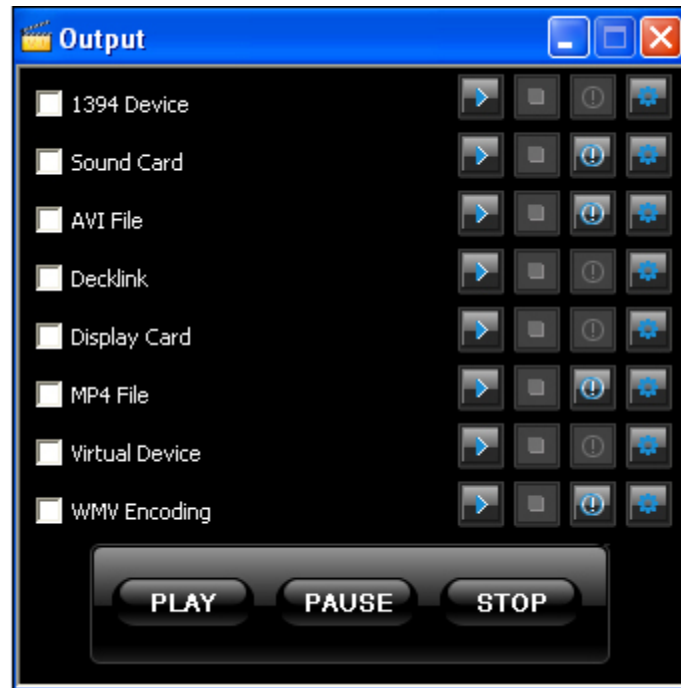


## 5.9 Push Streaming Live

### 1) WMV Push Streaming

Method one : VJDirector2 WMV output to push the stream for live

Run VJDirector2 (Live production Digital switching stations) and then open the WMV output “settings” and start to configure WMV output. For more information refer the VJDirector2 Help.

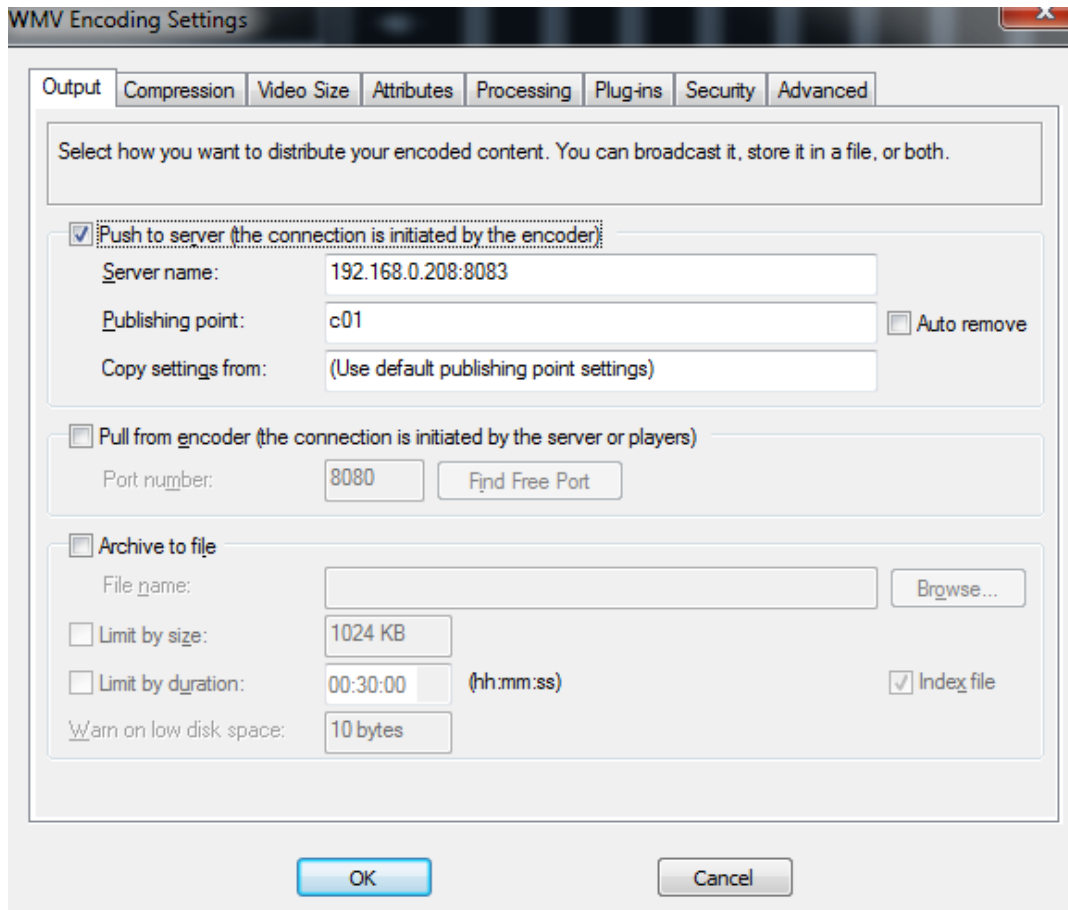


First, check “Push to server(the connection is initiated by the encoder)” in WMV Encoding settings window.

Second, fill IP and Port of VJLIVE server in Server Name box. Refer to “VJLIVE Configure” for how to set port. Its default port is 8083 for VJLIVE server.

Fill channel name of VJLIVE in Publishing point box. Please note that the name only with numbers or letters composition is valid.

At last, click OK to finish settings. Click Start on VJD2 and start to push stream.

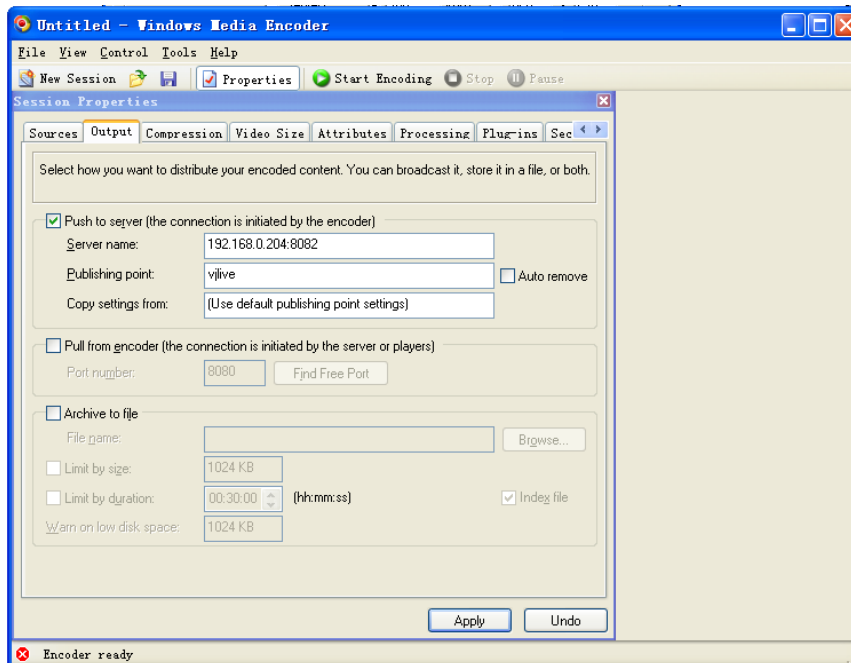


If the channel of VJLIVE has been set Push protection, please input username and password by manual in following window.



Method two:Use windows Media Encoder to push stream.



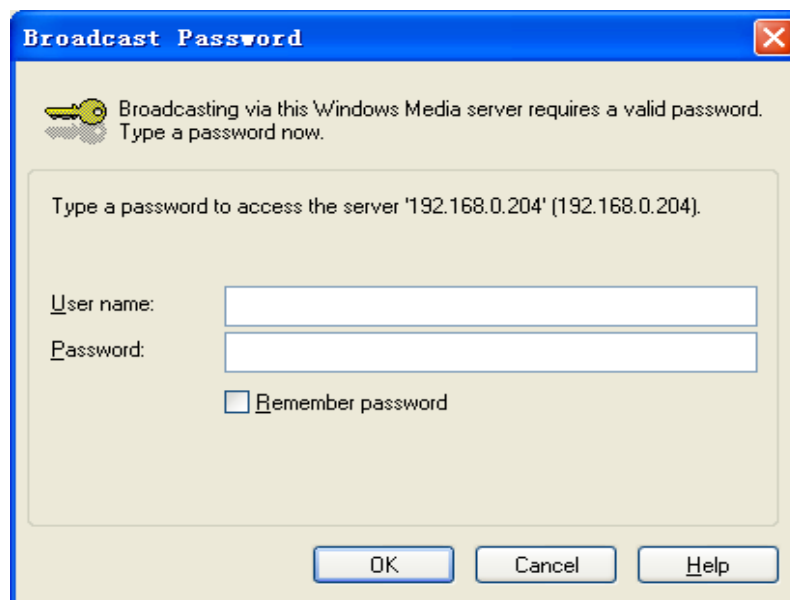


Run windows Media Encoder, create a session to setup the sources, then click output property.

Select “ push to server “in the popup configuration dialog.fill IP and Port of VJLIVE server in Server Name box. Refer to “VJLIVE Configure” for hot to set port. Its default port is 8083 for VJLIVE server.

fill channel name of VJLIVE in Publishing point box.

If VJLive enable the push protection, windows Media Encoder will pop up a dialog to let you input the user and password when you start encoding. As show in the figure:



2) H264 /ACC push stream.

Method one : VJDirector2 MP4 output to push the stream for live.

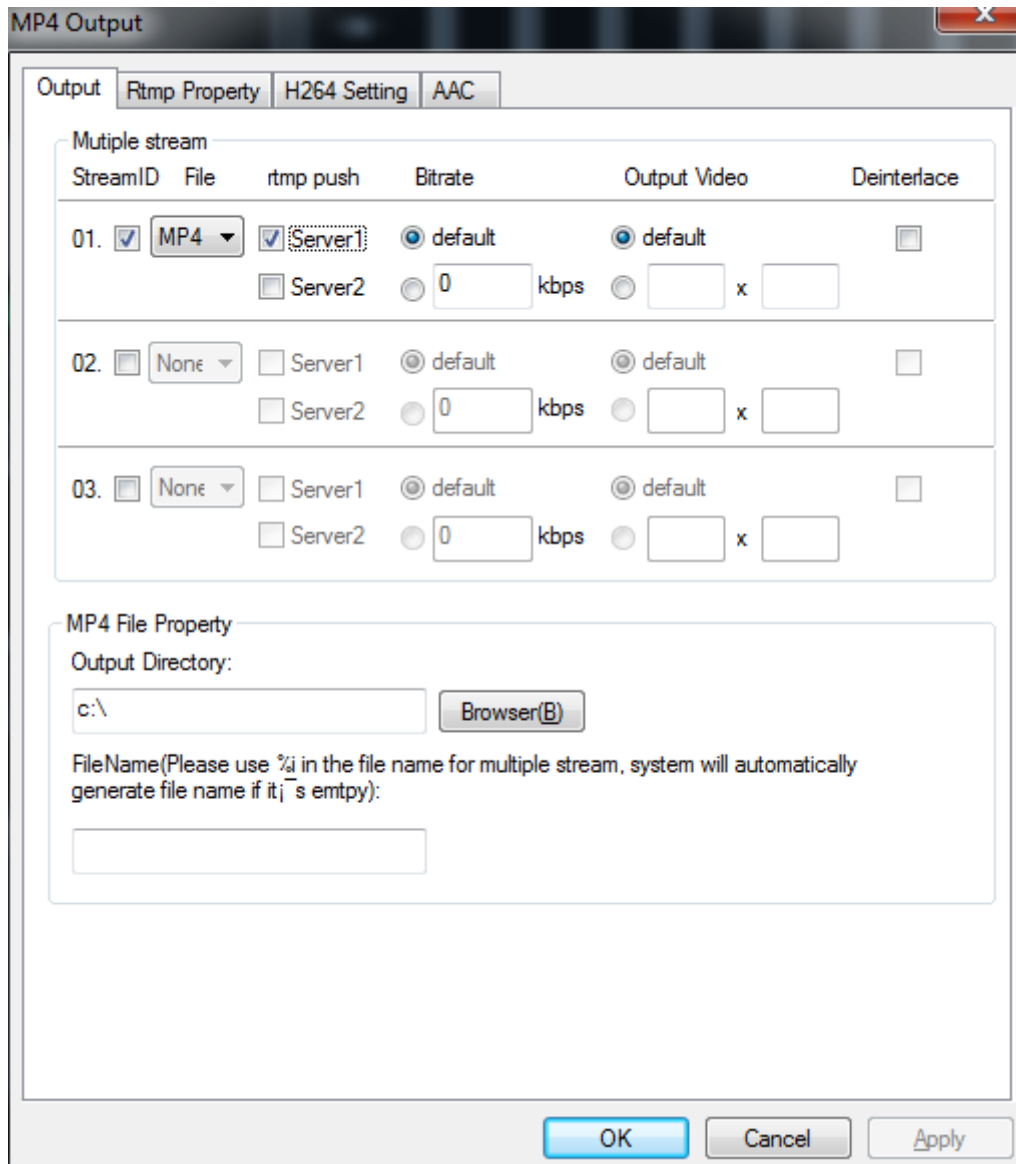
Run VJDirector2 (Live production Digital switching stations) and then open the WMV output “settings” and start to configure MP4 output. For more information refer the

VJDirector2 Help.



VJDirector2 MP4 output support three streams and each streaming can push to two VJLive servers. Here we only show to push stream to one server.

Step1: Click "Output" tab. Check "StreamID 01" for take effect for this stream. Then check "Server 1" under rtmp push . Shown as below:



Step2: Click RTMP Property tab to set on Rtmp Stream 01.

Fill address in URL box. Its default port of VJLIVE push RTMP stream is 1935.

Fill channel name of VJLIVE in Stream box. Note, the channel name only with numbers or letters composition is valid. Shown as below:

**MP4 Output**

Output | Rtmp Property | H264 Setting | AAC

**Tips:**  
 default port 1935  
 push example:  
 1. URL:rtmp://192.168.0.2/live Stream:channel\_foo  
 2. URL:rtmp://192.168.0.3:1938/live Stream:channel\_bar  
 Support RTMP Server: FMS, VJLive3, Wowza

**Rtmp Stream 01**

Server1: URL:  Stream:

Server2: URL:  Stream:

**Rtmp Stream 02**

Server1: URL:  Stream:

Server2: URL:  Stream:

**Rtmp Stream 03**

Server1: URL:  Stream:

Server2: URL:  Stream:

OK Cancel Apply

Then click “Ok” and start MP4 file output to start streaming push. For more details , please refer the VJDirector2 user manual how to use MP4.

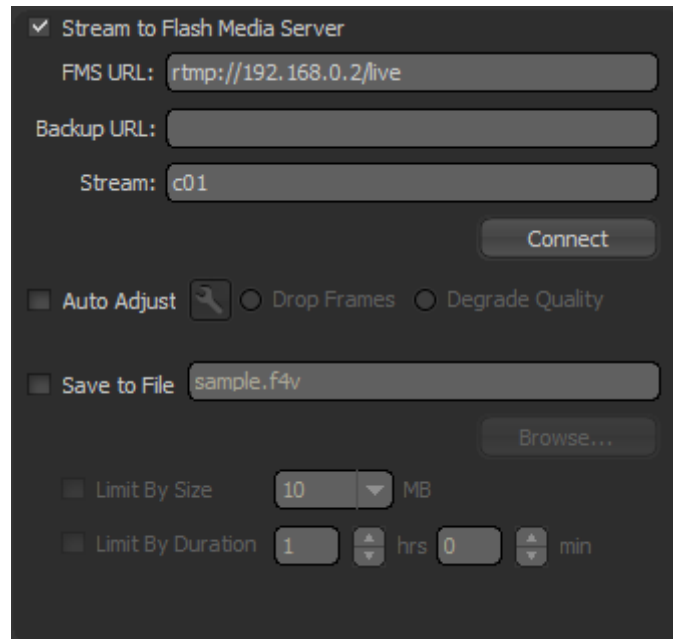
Method two: Using FMLE to push live stream.

Open FMLE, and check “Stream to Flash Media Server”.

Fill IP or domain name in FMS URL. The default prot of VJLIVE push RTMP stream is 1935

Fill channel name of VJLIVE in Stream. Note, the channel name only with numbers or letters composition is valid.

As shown below:

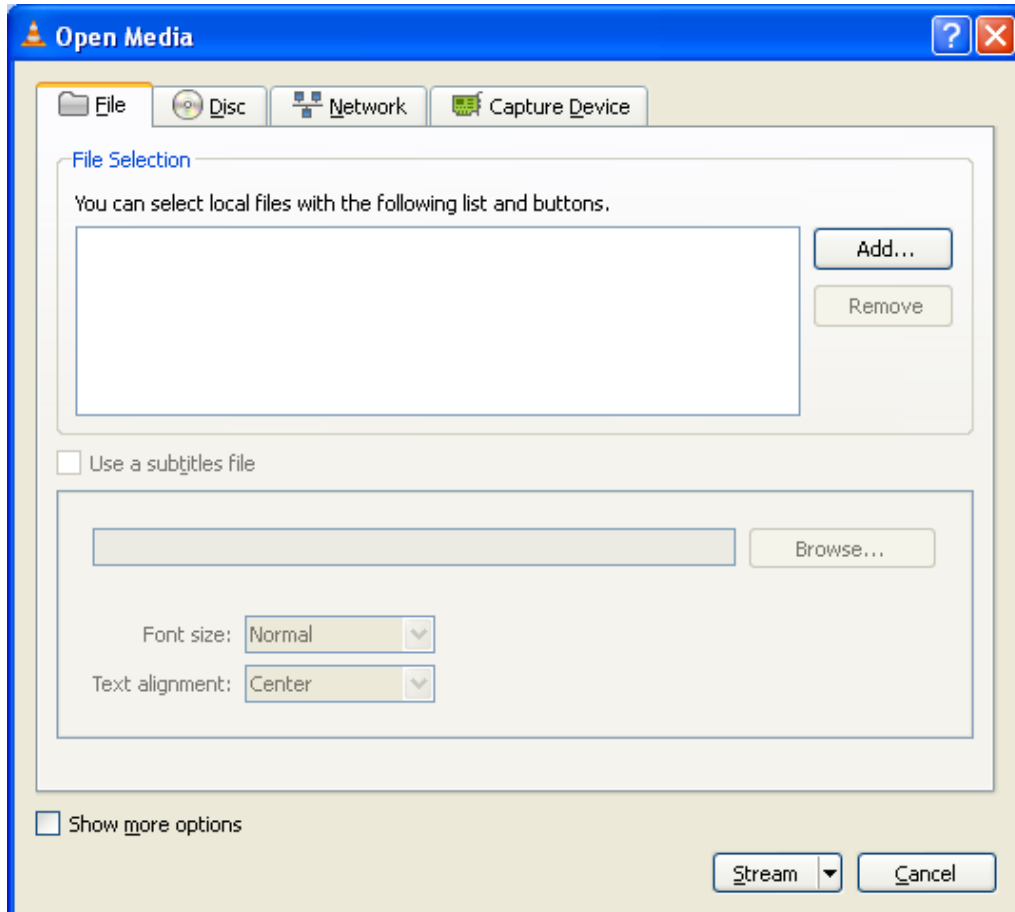


Finally click Connect, and then clickStart to push the steam. Please refer to the encoder help for FMLE detailed usage.

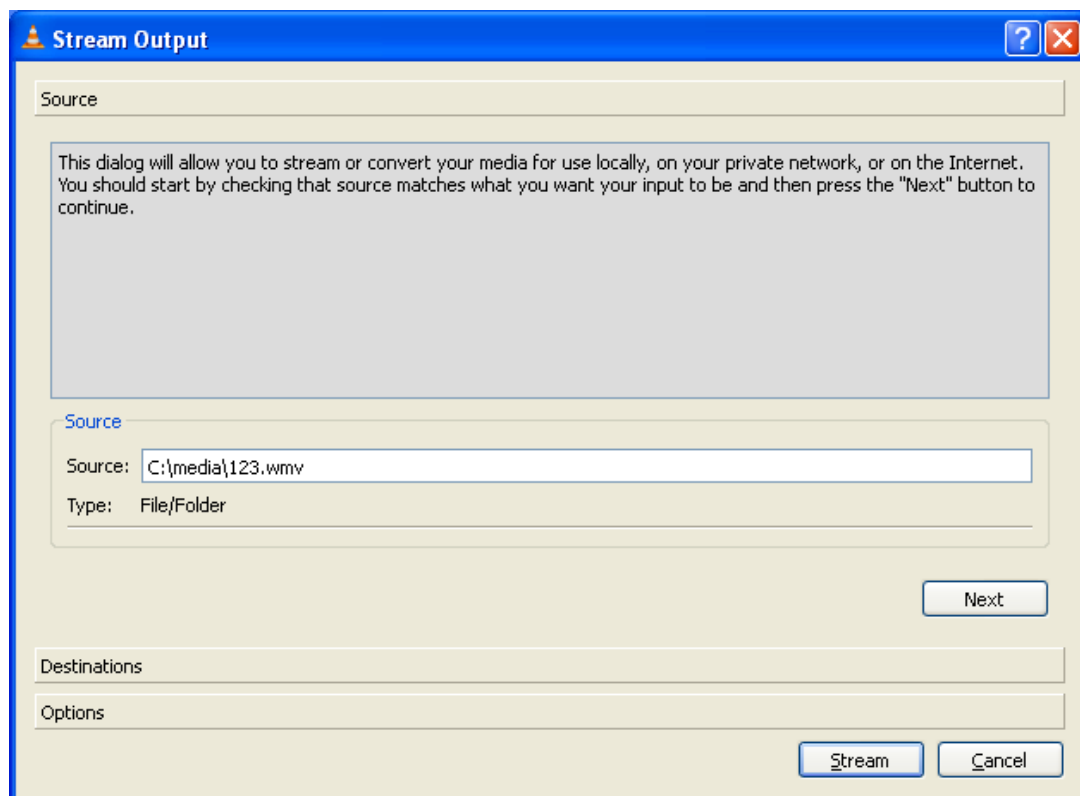
### 3) UDP push stream

Step1: Run the VLC media player,

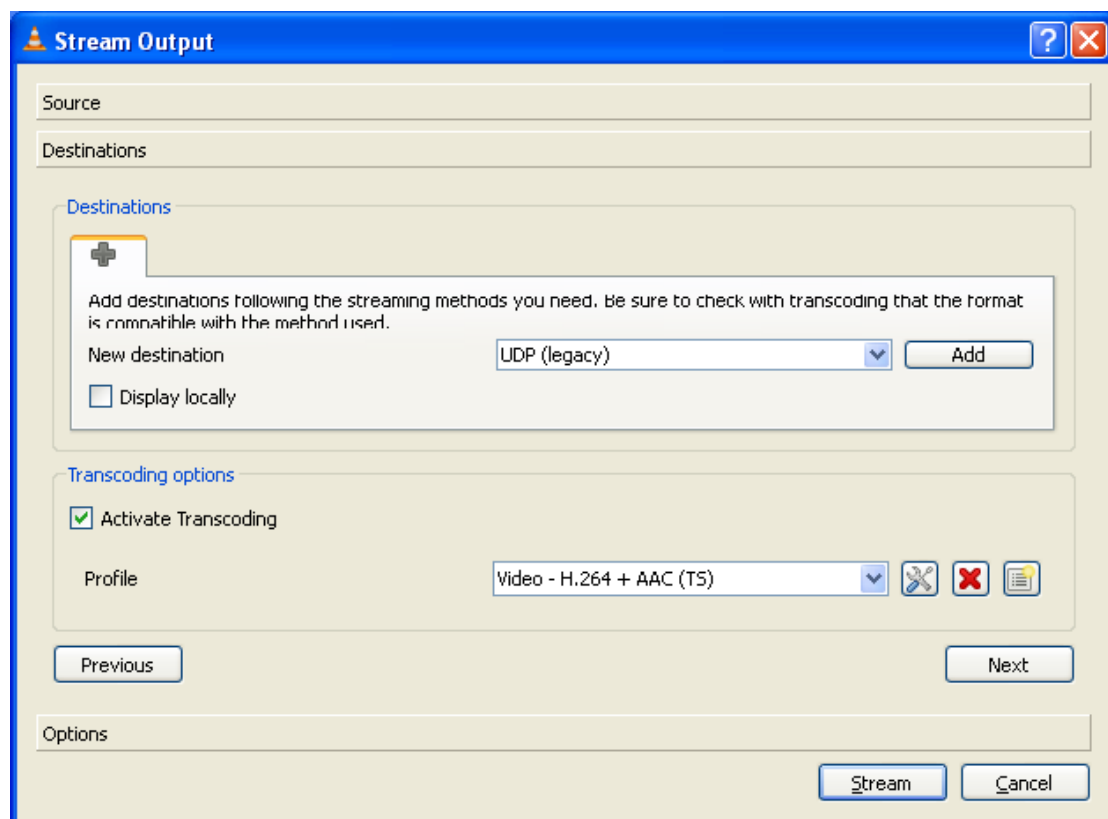
Click “Media->Stream” to open Media window. Add video source here, as shown below:



Step2: Click Stream on “Open Media” window to pop up Stream Output window. Click Next in Stream Output window.



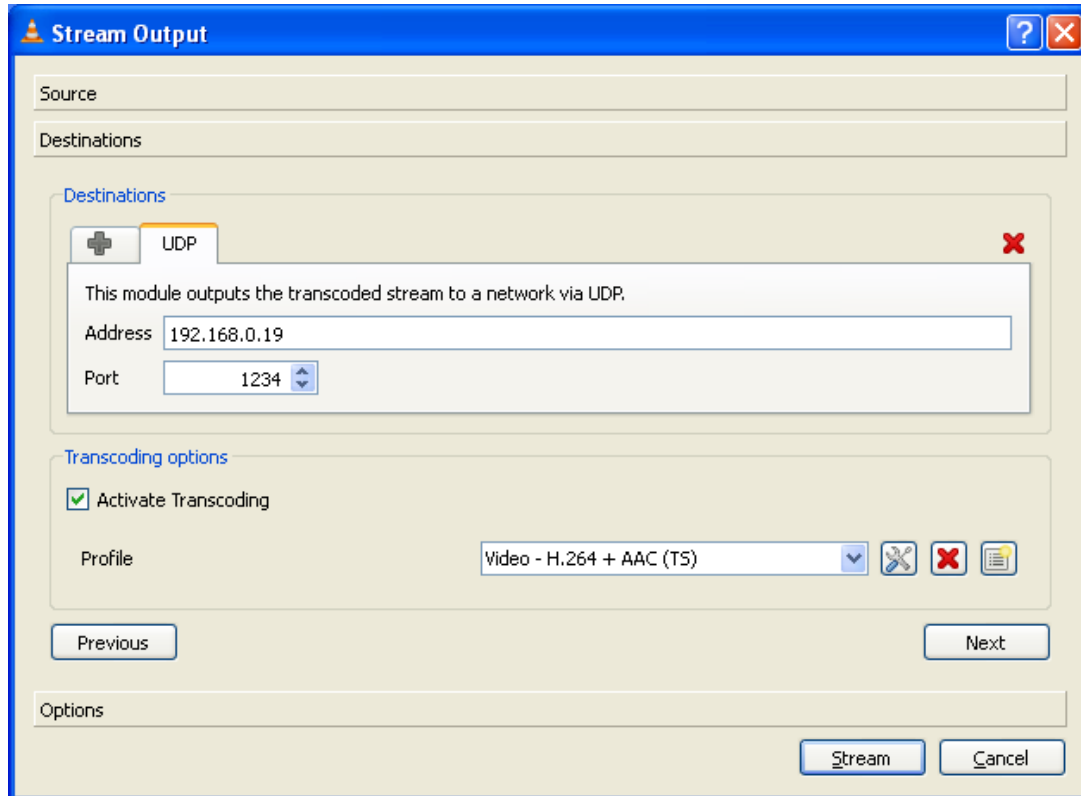
Step3: First , select video-h.264 + ACC (TS) in”transcoding option”-> “”Profile” and then select UDP (legacy) in New destination . And then click Add to pop up UDP Tab.



**Step4:**

Select UDP info in UDP tab. Input ip address of server in Address box, for Eg: 192.168.0.19. Input port of sever in Port box, for Eg: 1234. After fininsh configuration, click Stream to start to encode.

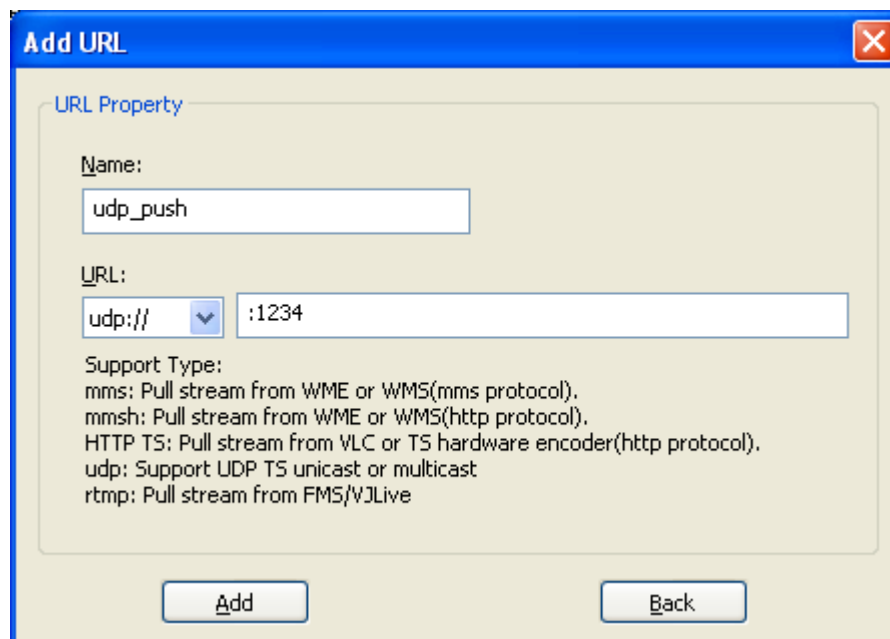
Please refer to the VLC media player manual for more details.



At last, add a stream in channel of VJLIVE, shown as below.

The setting details are shown as below:

Input name by yourself in Name box. Select "udp://" in drop-down box, and input port in, for Eg: ":1234".



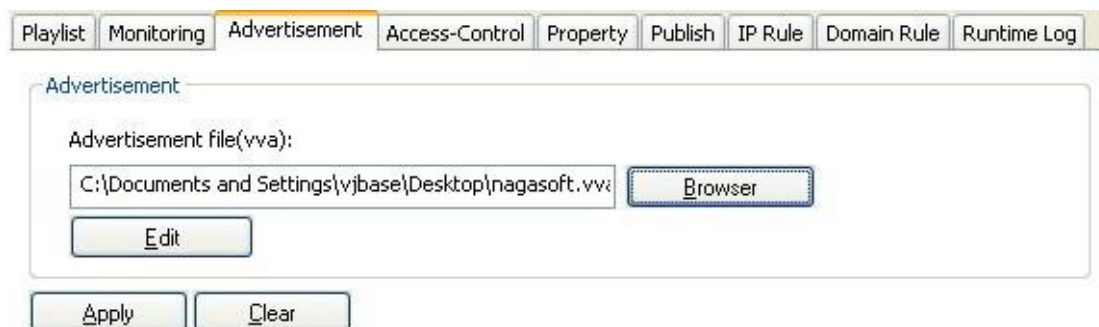
About how to add streaming refer to 5.1.8 Channel Playlist.

#### 4) Other encoder service

Only support using software to push stream, It also supports other hardware encoders, such as Nagasoft VMV9 encoding box, Nagasoft mobile streaming media encoders, and TS hardware encoders and others.

## 5.10 Advertisement (Source Channel)

Click “VJLIVE” from server list and select a channel, then click “Advertisement” to open its setting window. You can do operation for it.



Tip: Use VJADMaker.exe to edit advertisement file(vva) or create a new one.

When you open first time, there is no Ads. Click “Browser” button to select the advertisement file (vva.file). Click “Edit” button to open advertising editor. When you open the editor, Ads can be edited. If you want to edit the advertisement files, you have to select a advertisement file.

Please refer to Appendix II “Advertising Editor” for the use of advertising editor.

When ads editing are finished, you can click “Browser” button to load the Ad. At last, click “Apply” button to publish the ads.

If you want to remove the published advertisement, just click “Clear” button. Then the ad will be removed.

## 5.11 Access Control (Source Channel)

Select a source channel, and then click the “Access-Control” property tag. Access control can protect the content published by the ISP.

There are 3 types of Access Control. They are:

- 1) Simple password. The player will ask user to input password. Fill the password at this area.
- 2) User+Password access control. The player will ask user to input user and password, then post the user and password to the web page which you have set to do check. Fill the URL of the user and passed check web page at this area.
- 3) Domain access control. The player will read the URL of the current page, and then post the access URL to the web page which you have set to do check. Fill the URL of the domain in check web page at this area.

ISP should develop the user+password check web page or the domain check web page according to the format in the sdk document. Refer to Appendix I: Access Control for detail.

File List Manager	Directory Manager	Export Manager	Monitoring	Advertisement	Access-Control	Domain Rule	IP Rule	Heartbeat	Network Disk Map	Runtime Log
-------------------	-------------------	----------------	------------	---------------	----------------	-------------	---------	-----------	------------------	-------------

Access-Control

Type:

Simple Password

User +Password

Domain

Clear

Apply

- 1.Simple password, the player will ask user to input that password. Fill the password at this area.
- 2.User +Password access control, the player will ask user to input user and password, then post the user and password to the web page which you have set to do check. Fill the URL of the user and password check web page at this area.
- 3.Domain access control, the player will read the URL of the current page, then post the access URL to the web page which you have set to do at this area.
- 4.ISP should develop the user+password check web page or the domain check web page according to the format in the sdk document.

## 5.12 Publish (source channel)

Select a source channel, and then click the “Publish” property tag. You can see the play code. You should copy the code and inset them into your web page. So users can open that web page to play. You can see default publish codes, IE play codes and flash play code. Each live channel code is independent and does not change with live content.

Note: It is valid for Flash player code only with RTMP push or pull stream.

There is a “Test Play” button for corresponding to “IE Play Code” or “Flash Play Code”. Click “Test Play” to play by use corresponding code. You can also click “Test Play” in the channel management interface to play by using the IE player code.

Extract IE play code and insert into website, then you can publish on the website.

Vjms link protocols: `vjms://ip:tport:nport/live/cid=....|channel name`.

Vjms://: the protocol header.

ip: Index server ip address or domain name.

Tport: Index server port. The default port is 80.

Nport: Nat server port. The live port is 3502 by default, and the vod port is 3501 by default.

The default port for Tport and nport can be omitted, for Eg:

`Vjms://ip/`

`Vjms:ip:tport/`

`Vjms://ip::nport`

`/live/cid=...`for live content, cid taken from the live channel. For EG: `/Live/cid=1`.

Please refer to VJocx3 interface of PDF Document about interface in your code.

Flash play code work at P2P mode by default (accelerator VJStream is installed and running). If the accelerator is not installed or not running, it will automatically run in a direct attached. Accelerator with the IE ActiveX player plug-in is installed and set to run automatically. Refer to chapter 8.Player for detail.



Playlist	Monitoring	Advertisement	Access-Control	Property	Publish	IP Rule	Domain Rule	Runtime Log
----------	------------	---------------	----------------	----------	---------	---------	-------------	-------------

Web play code:(Insert this code into your web page)

VJMS URL:

IE Play Code:

```

<object id="VJOcx3" classid="CLSID:174012D5-4141-44D6-8F44-729BB97C56EB" codebase="http://www.naga:
<PARAM NAME="Src" VALUE="vjms://tracker.nagasoftware.cn:80:3502/live/cid=34865|c01">
<PARAM NAME="StartDelay" VALUE="5">
<PARAM NAME="PlayMode" VALUE="full">
<PARAM NAME="autoplay" value="true">
</object>

```

FLASH Play Code: (Only can be used with rtmp push and pull)

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-str
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
  <head>
    <title>VJMSPlayer</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
    <style type="text/css" media="screen">
      html, body { height:100%; background-color: #000000; }
      body { margin:0; padding:0; overflow:hidden; }
      #flashContent { width:720; height:624; }
    </style>
  </head>
  <body>
    <div id="flashContent">
      <object classid="clsid:d27c6b6e-ae6d-11cf-96b8-444553540000" width="720"
        <param name="movie" value="VJMSPlayer.swf" />
        <param name="quality" value="high" />
      </object>
    </div>
  </body>
</html>

```

## 5.13 IP Rule (channel level)

IP rules are used to filter the IP of visitors using P2P/HTTP/RTMP agreement. Find in the IP rule list in order from top to bottom. If found it, it will terminates immediately and return the allow/forbid results. If not, it will return forbid results. Filters protocols can be single or multiple selections.

IP rules includes channel-level and service-Level. The channel-level is higher priority. First, search for matching channel-level rules. If find a matching item, then return to the rule results. If not, search service-level rules.

For enabling this function, click the source channels or mirrored and then click "IP Rule" tab. Check "Enable" in the IP rule list, and then click "Submit" button. Uncheck "Enable" and click "Submit" button again to disable this function.

[Playlist](#)
[Monitoring](#)
[Advertisement](#)
[Access-Control](#)
[Property](#)
[Publish](#)
[IP Rule](#)
[Domain Rule](#)
[Runtime Log](#)

☒ Enable

Start IP	End IP	Allow	Protocols
192.168.0.19	192.168.0.19	Yes	P2P RTMP
192.168.0.1	192.168.0.30	No	P2P HTTP RTMP
192.168.0.32	192.168.0.32	Yes	P2P HTTP
192.168.0.1	192.168.1.1	No	RTMP
121.9.204.103	121.9.205.103	No	HTTP RTMP

[Add](#)
[Modify](#)
[Delete](#)
[Submit](#)
[Refresh](#)

Source channel IP Rules

IP rules management:

### 1) Add

Start IP: the filter IP for the start IP.

End IP: the filter IP for the end IP. Filter one IP by setting the same for start IP and end IP.

Allows: Whether allows filtering of IP access to the appropriate protocols.

Protocol: filter protocols. P2P, HTTP and RTMP protocols are available for single or multiple selections.

**New IP Rule**

Begin IP: 192 . 168 . 0 . 1  
 End IP: 192 . 168 . 0 . 30  
 Allow: No  
 Protocol: ☒ P2P ☒ HTTP ☒ RTMP

[Ok](#)
[Cancel](#)

### 2) Modify

Select IP a rule in the rules list, and then click "Modify" to modify the rule. If you want to change the location of the rule, you can adjust by using the "UP" and "Down" button.

### 3) Delete

Select IP a rule in the rules list, and then click "Delete" which one IP rule you want to delete from the list.

### 4) Submit

Every time you check/uncheck the "Enable" or do operation for add, modify, delete, adjust the position, you must click "Submit" to present the results of operations to the server.

## 5) Refresh

Click “Refresh” to verify the operation results whether are submitted to the server.

## 5.14 Domain Rule (channel level)

Domain Rules are used to filter the visitor access using P2P/HTTP/RTMP agreement. Find in the domain rule list in order from top to bottom. If found it, it will terminates immediately and return the allow/forbid results. If not, it will return forbid results. Filters protocols can be single or multiple selections.

Domain rule includes channel level and service Level. The channel level is higher priority. First, search for matching channel level rules. If find a matching item, then return to the rule results. If not, search service level rules.

Domain Rules matching algorithm:

Given access web address (for eg: http:a.b.com /yyy/zzz.jsp). Extract the domain (for Eg: a.b.com) between protocol header “http://” and the first sign “/”, and delete the port together. According to this domain to search the list, it matches for right to left characters without case sensitive. For example:


Domain	Domain Rule	Match
a.b.com	b.com	Matching
b.com	a.b.com	Not Match

Click source or mirrored channels and then click domain rule to enter into its window. Check “Enabled” and then click “Submit” to enable domain rules. Uncheck “Enable” and then click “Submit” to disable it.

PlaylistMonitoringAdvertisementAccess-ControlPropertyPublishIP RuleDomain RuleRuntime Log

☒ Enable

Domain	Allow	Protocols
www.nagasoftware.cn	No	RTMP
nagasoftware.cn	Yes	P2P HTTP RTMP



AddModifyDeleteSubmitRefresh

Source channels domain rules

Domain rule management list:

### 1) Add

Click “Add” to add the domain name. Enter indicates to filter all domain names.

### 2) Modify

Select a rule in the rule list and the click “Modify” to modify the rule. If you want to

change the location of the rule, you can adjust the location by click “UP” and “Down” button.

### 3) Delete

Select a rule in the rule list, and then click “Delete” to delete the rule.

### 4) Submit

Every time you check/uncheck “Enable” or add, modify, delete, adjust the position after the operation, you must click “Submit” to present the results of operations to the server.

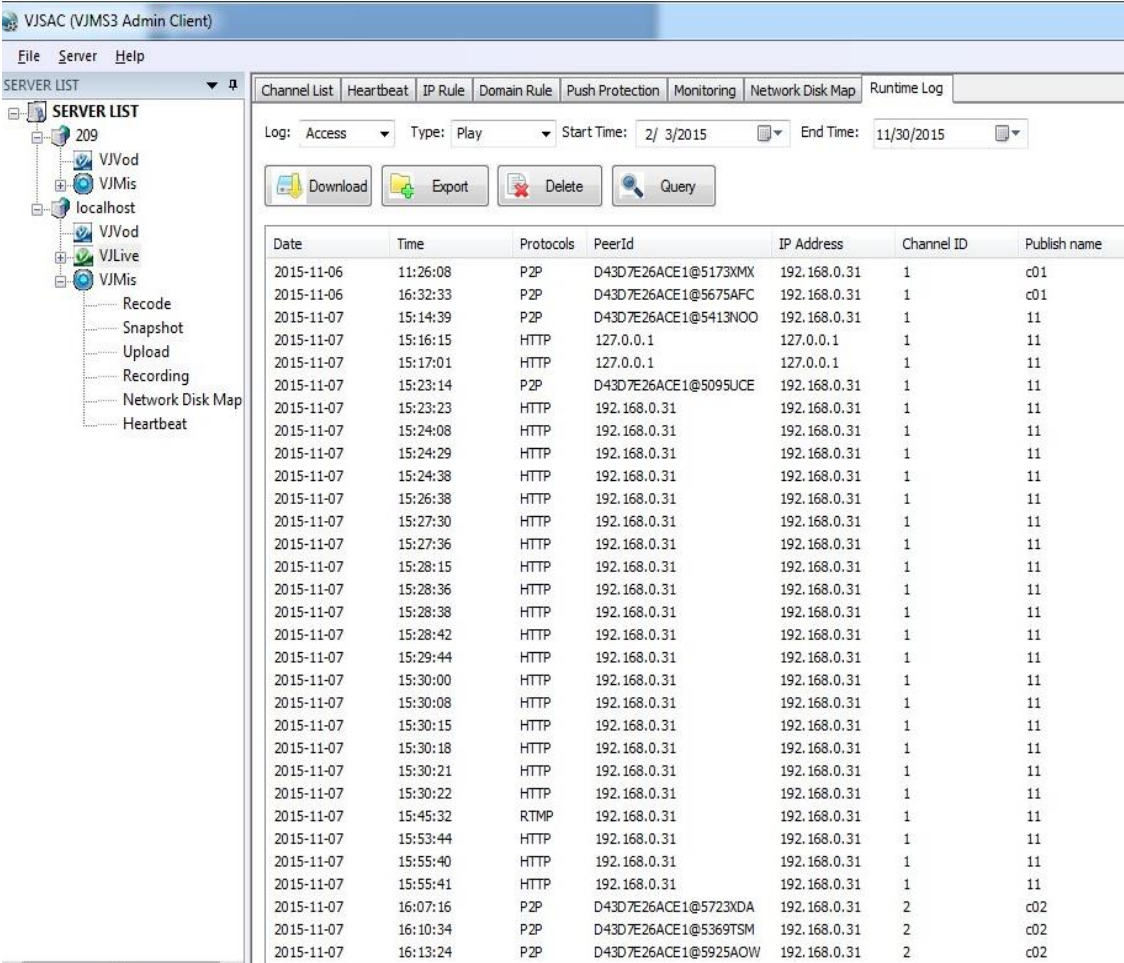
### 5) Refresh

Click “Refresh” to verify the operation result s whether are submitted to the server.

## 5.15 RunTime Log (Channel level)

By queried live channel access log and static log, you can know the access situation about the channel of IP rules, domain rules or others, also know the status situation about the channel of upload speed, memory usage, online number, CPU usage and other static. These logs can be exported to generate access and status charts. You can specify a data range for query, such as one day or one month. But the span for the data range for query should not be too large and the log should not be frequently queried.

We recommended to query in the case of small number of users, otherwise it may affect the performance and reliability of service. The format details are shown in Appendix III: Server Log Format.



Date	Time	Protocols	PeerId	IP Address	Channel ID	Publish name
2015-11-06	11:26:08	P2P	D43D7E26ACE1@5173XMX	192.168.0.31	1	c01
2015-11-06	16:32:33	P2P	D43D7E26ACE1@5675AFC	192.168.0.31	1	c01
2015-11-07	15:14:39	P2P	D43D7E26ACE1@5413NOO	192.168.0.31	1	11
2015-11-07	15:16:15	HTTP	127.0.0.1	127.0.0.1	1	11
2015-11-07	15:17:01	HTTP	127.0.0.1	127.0.0.1	1	11
2015-11-07	15:23:14	P2P	D43D7E26ACE1@5095UCE	192.168.0.31	1	11
2015-11-07	15:23:23	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:24:08	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:24:29	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:24:38	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:26:38	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:27:30	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:27:36	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:28:15	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:28:36	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:28:38	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:28:42	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:29:44	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:00	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:08	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:15	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:18	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:21	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:30:22	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:45:32	RTMP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:53:44	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:55:40	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	15:55:41	HTTP	192.168.0.31	192.168.0.31	1	11
2015-11-07	16:07:16	P2P	D43D7E26ACE1@5723XDA	192.168.0.31	2	c02
2015-11-07	16:10:34	P2P	D43D7E26ACE1@5369TSM	192.168.0.31	2	c02
2015-11-07	16:13:24	P2P	D43D7E26ACE1@5925AOW	192.168.0.31	2	c02

All parameters must be chosen before management, or it will affect the next operation.

Four parameters must be chosen, namely Logs, Type, Start time and End time.

Logs: logs of management. There are two types, namely access log and status log.

Types: There are five types, namely play, close, IP rule, domain rule and push for access log. And there is empty for status log.

Start time: specifies a date range for log management at start time.

End time: specify a date range for log management at end time. Note: end time must be greater than start time, otherwise there is empty for log.

Note: End time must be greater than the start time or the log is empty. After all parameters are selected you can log the following.

#### **1) Download**

The log files are stored in the log directory of VJLIVE server installation directory. click "Download" to download the log files within the date range on the server to the local, and integrate in to the local log cache files. The log files id default to download in the directory of "\\AppData\\Roaming\\Nagasoftware\\VJSAC\\Log".

#### **2) Export log**

Click "Export" and choose a directory for the export log file, then click "Save " to save as TXT file.

#### **3) Delete log**

Click "Delete" to delete the log in queries list and local cache.

#### **4) Query log**

Click Query to download log specified a data time form sever, and then the logs are shown on the list. If there are not local log cache files, it will generate the log cache to the directory of "\\AppData\\Roaming\\Nagasoftware\\VJSAC\\Log".

## **5.16 Monitoring (Channel level)**

Select a source channel or mirrored channel, then click "Monitoring" section, you can monitor the current channel ID, CPU usage, memory usage, channel start time, channel running time, direct connection number, current upload speed, total upload, current download speed, total download, P2P online users, HTTP online users, RTMP online users, P2P upload speed, P2P total upload, HTTP upload speed, HTTP total upload, RTMP upload speed, RTMP total upload.

Monitoring can be done by mouse click "Refresh "or you can automatic refresh drop down box to seen automatic refresh time. You can set 1 second, 3 seconds, 5 seconds, 8 seconds and 10 seconds, the refresh interval.

Playlist	Monitoring	Advertisement	Access-Control	Property	Publish	IP Rule	Domain Rule	Runtime Log
VJLive Channel								
1 second								
Channel ID:	34865	P2P Onlines:	0					
CPU Usage:	27%	HTTP Onlines:	0					
Memory Usage:	13MB	RTMP Onlines:	0					
Start Time:	2011-10-09 17:10:23	P2P Upload Speed:	0.00 kb/s					
Started:	0 day, 00:57:10	P2P Total Upload:	0.00MB					
Onlines:	0	HTTP Upload Speed:	0.00 kb/s					
Direct Connections:	1	HTTP Total Upload:	0.00MB					
Upload Speed:	0.00 kb/s	RTMP Upload Speed:	0.00 kb/s					
Total Upload:	0.00MB	RTMP Total Upload:	0.00MB					
Download Speed:	0.40 mb/s							
Total Download:	170.00MB							
Refresh								

## 5.17 HLS

### 1) HLS

The full name for HLS is Apple HTTP Live Streaming. HLS based on the HTTP protocol broadcast protocol is developed by Apple. iPhone, iPad and Android3.0+ systems all support HLS protocol currently.

Currently we only support the following formats program source for HLS. There are RTMP pushing stream, FLV file, UDP TS, HTTP TS, and encoder only supports H.264 Baseline / AAC Low and H.264 Baseline / MP3.

Before you enable HLS, you need to install a Web server (Apache, IIS, etc.). Web servers need to add the following MIME type:

.m3u8 application / x-mpegURL

.ts video / MP2T

Configure and enable HLS is shown in the following figure.

Playlist	Monitoring	Advertisement	Access-Control	Property	Publish	IP Rule	Domain Rule	Runtime Log	HLS	Playback
<input checked="" type="checkbox"/> Enable HLS										
HLS Property <div>             Path: <input type="text" value="E:\NagaSite-V3\download\media\hls\1"/> <input type="button" value="Browse"/> </div> <p>This directory should can be accessed from web server such as IIS/Apache</p> <div>             m3u8 Filename: <input type="text" value="yanshi.m3u8"/> </div> <div>             Format: <input type="text" value="mpegts"/> </div> <div>             Segment Time: <input type="text" value="10"/> Default 10s           </div> <div> <input checked="" type="checkbox"/> Enable UDPTS <input type="text" value="192.168.0.26:1234"/> (Format: IP:Prot such as 127.0.0.1:1234 )           </div> <p>Note: Please re-enable HLS to make your changes take effect.</p> <div> <input type="button" value="Commit"/> </div>										

The saved directory in the web server must be access (by configuring a virtual directory, or directly save in the web directory).

File format supports mpegts and mp4. In general, we use mpegts format.

Do not modify segment time. You must use the default time in 10 seconds.

Check “Enable” and click the "Submit" button to enable HLS, the service will start a process named naga\_segmenter.exe for slicing.

Input HTTP address of m3u8 on the platform supported HLS function to play. For example, <http://192.168.0.104/hls/c01.m3u8>.

Apple HLS recommended encoding parameters as follows:

<http://developer.apple.com/library/ios/#technotes/tn2224/index.html>

HTTP Streaming Encode Recommendations													
16:9 Aspect Ratio								Works on iPod Touch Gens 2, 3, 4	Works on iPhone 3G, 3GS, 4	Works on iPad 1, 2	Works on New iPad	Works on Apple TV	
	Dimensions	Frame Rate *	Total Bit Rate	Video Bit Rate	Audio Bit Rate	Audio Sample Rate	Keyframe**	Restrict Profile to:					
CELL	480x320	na	64	na	64	44.1	na	na	*	*	*	*	*
CELL	416x234	10 to 12	264	200	64	44.1	30 to 36	Baseline, 3.0	*	*	*	*	*
CELL	480x270	12 to 15	464	400	64	44.1	36 to 45	Baseline, 3.0	*	*	*	*	*
WiFi	640x360	29.97	664	600	64	44.1	90	Baseline, 3.0	*	*	*	*	*
WiFi	640x360	29.97	1264	1200	64	44.1	90	Baseline, 3.1			*	*	*
WiFi	960x540	29.97	1864	1800	64	44.1	90	Main, 3.1			*	*	*
WiFi	960x540	29.97	2564	2500	64	44.1	90	Main, 3.1			*	*	*
WiFi	1280x720	29.97	4564	4500	64	44.1	90	Main, 3.1			*	*	*
WiFi	1280x720	29.97	6564	6500	64	44.1	90	Main, 3.1			*	*	*
WiFi	1920x1080	29.97	8564	8500	64	44.1	90	High, 4.0				*	*

4:3 Aspect Ratio								
	Dimensions	Frame Rate *	Total Bit Rate	Video Bit Rate	Audio Bit Rate	Audio Sample Rate	Keyframe	Restrict Profile to:
CELL	480x320	na	64	na	64	44.1	na	na
CELL	400x300	10 to 12	264	200	64	44.1	30 to 36	Baseline, 3.0
CELL	480x360	12 to 15	464	400	64	44.1	36 to 45	Baseline, 3.0
WiFi	640x480	29.97	664	600	64	44.1	90	Baseline, 3.0
WiFi	640x480	29.97	1264	1200	64	44.1	90	Baseline, 3.1
WiFi	960x720	29.97	1864	1800	64	44.1	90	Main, 3.1
WiFi	960x720	29.97	2564	2500	64	44.1	90	Main, 3.1
WiFi	1280x960	29.97	4564	4500	64	44.1	90	Main, 3.1
WiFi	1280x960	29.97	6564	6500	64	44.1	90	Main, 3.1
WiFi	1920x1080	29.97	8564	8500	64	44.1	90	High, 4.0

\* Frame Rate: Assumes source frame rate is 29.97.

## 2) UDP TS

UDP TS is packaged by TS format, and send network stream. Input the address and UDP port, then check “Enable” to make effect for this function. As shown below.

Playlist

Monitoring

Advertisement

Access-Control

Property

Publish

IP Rule

Domain Rule

Runtime Log

HLS

Playback

☒ Enable HLS

HLS Property

Path: E:\NagaSite-V3\download\media\hls\1

Browse

This directory should can be accessed from web server such as IIS/Apache

m3u8 Filename: yanshi.m3u8

Format: mpegts

Segment Time: 10

Default 10s

☒ Enable UDPTS 192.168.0.26:1234 (Format: IP:Port such as 127.0.0.1:1234)

Note: Please re-enable HLS to make your changes take effect.

Commit

Unicast for example: UDP output to <udp://127.0.0.1:1234>. Open VLC player and select “Open network stream”, then input the address <udp://@:1234> to play.

Multicast for example: UDP output to <udp://234.0.0.10:1234>. Open VLC player and select “Open network stream”, then input the address <udp://@234.0.0.10:1234> to play.

## 5.18 Playback

If you want to use this function, you must use playback player. The live contents are saved in disk by day. And playback player will get the saved contents to play.

The playback setting is shown below:

Playlist	Monitoring	Advertisement	Access-Control	Property	Publish	IP Rule	Domain Name	Runtime Log	HLS	Playback
----------	------------	---------------	----------------	----------	---------	---------	-------------	-------------	-----	----------

☒ Enable Playback

Setting

Storage Path:

Storage directory need to have enough free space, the formula: the required space = number of days × 3600 × 24 × live bit rate (kb / s) / (8 × 1024 × 1024) GB.

Reserve days:

Play codes

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
  <head>
    <title>VJTVPlayer </title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
    <style type="text/css" media="screen">
      html, body { height:100%; background-color: #000000; }
      body { margin:0; padding:0; overflow:hidden; }
      #flashContent { width:100%; height:100%; }
    </style>
  </head>
  <body>
    <div id="flashContent">
      <object classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000" width="100%" height="100%" id="VJTVPl
        <param name="movie" value="VJTVPlayer.swf" />
  
```

VJVod system support file types, include "wmv" 、 "asf" 、 "wma" 、 "rm" 、 "rmvb" 、 "flv" 、 "mp3" 、 "mp4" 、 "mkv" 、 "avi" 、 "mpg" 、 "vob" 、 "mov" 、 "3gp" 、 "ogg" 、 "ogm" .



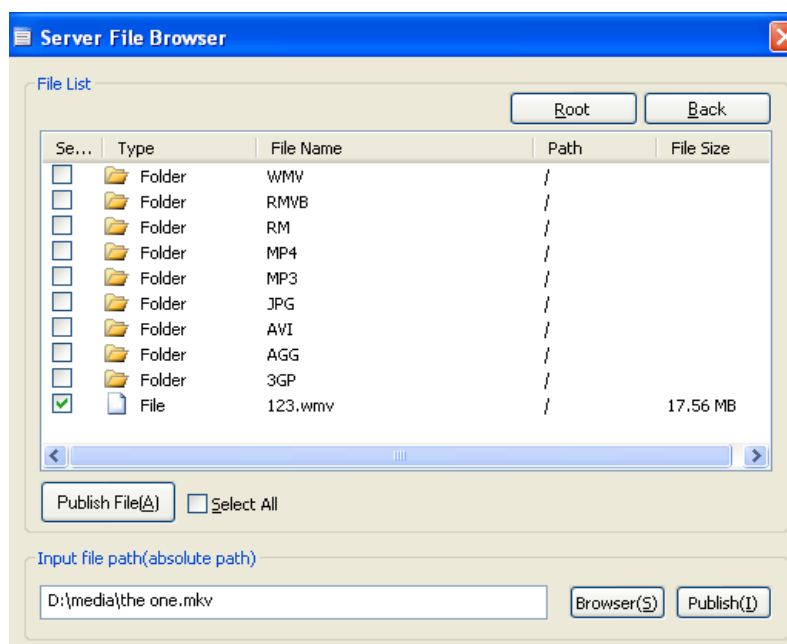


### 1) Add File

Click “Add File”, you can select the files on the server. Please refer to 3.3.2 VJVod Configuration to set media root directory.

Open the add document window, you can check the files. And then click “Publish” button to publish the files you have checked.

Meanwhile, you can directly enter the file path to add file. In the “Input file path” box, fill in the absolute path of the file on the server, and then click “Publish” button. If the server is in local, you can also click “Browse” button to select files except the root directory of the server.

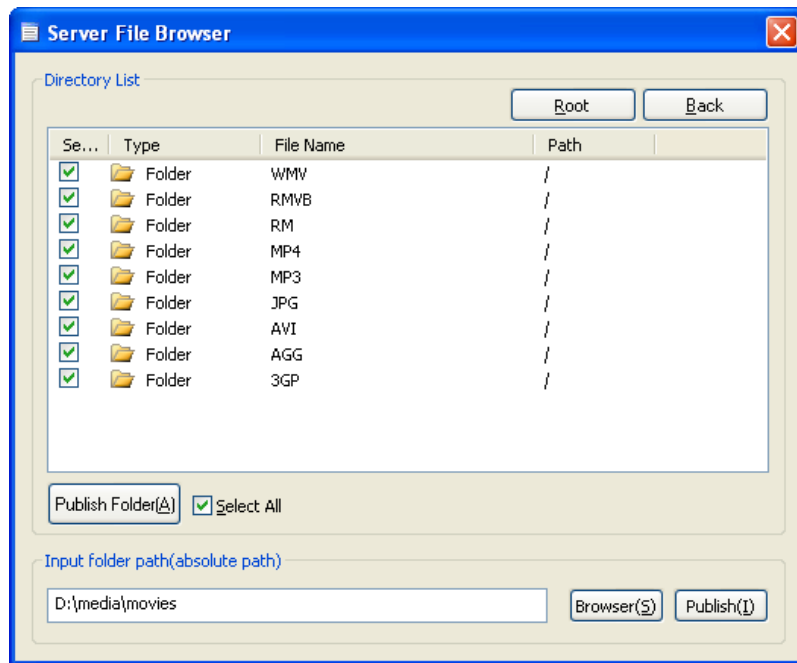


### 2) Add folder

Click “Add Folder” button to select the folder on the server. The supported files in the folder will be released. Please refer to the 3.3.2 VJVID Configuration to set media root folder.

After open the window, check the folders and click “Publish” button, so you can publish all the videos files in the folders.

Meanwhile, you can directly enter the folder path to add folder. In the “Input folder path” box, fill in the absolute path of the folder on the server, and then click “Publish” button. If the server is in local, you can also click “Browse” button to select folder except the root directory of the server.



### 3) Un-publish

Check the folder on the list or check the file which you don't want to publish, then click "Unpublish" button. The video files will be not publishing on the server. It will not be deleted. Just it will stop the file to publish.

### 4) Delete

Click "Delete" button to delete the files you want to delete.

Note: The files will be deleted from the server. So it needs to be cautious.

### 5) Refresh

Click "Refresh" to refresh the list.

### 6) Search

Directly enter the file name to search. It supports fuzzy search.

### 7) Property Columns

## File List

Search:

Add File
 Add Folder
 Unpublish
 Delete
 Refresh

Select	File Path	Type	Bitrate	Size	Duration	HashID	PublishState	PublishDate	ModifyDate	Uploaded	UploadSpeed	Clients
<input type="checkbox"/>	c:/med...	wmv	280 k...	17...	00:08:44	5495...	Published	2011-10-...	2010-05-...	0.00 MB	0.00 KB/5	0

## 6.2 View Codes

Right click any file you have selected, so you can get the file "Hash" code, "VJMS URL", "IE play code (P2P)", "Flash player code" and "Flash play code (P2P)". Meanwhile you can also select "test IE play" or "test flash player" to test playing by using respectively "IE play code (P2P)" and "Flash play code (P2P)".

In addition to the above test method, you can also double click the file to play, or copy IE play code (P2P) to the web code to play.

Publish
Unpublish
Republish
Copy Hash Code
Copy VJMS URL
Copy IE Play Code (P2P)
Copy FLASH Play Code
Copy FLASH Play Code (P2P)
Test IE Play
Test FLASH Play
Property

Each file has unique hash code, so you can watch accurate file each time.

Hash codes are shown as follow:

Hash=0e59fd269f10c15f898e8c58c46ad232&mime=vob&bitrate=456000&size=1712128&time=29

Each file has unique VJMS link address. Shown as follow:

vjms://ip:tpport:nport/vod/cid=...&hash=...&mime=...&time=...&size=...&bitrate=...&start=...&end=... | Resource name

vjms:// For the protocol header

ip: Index server ip Address or domain name

tpport: Index server port, the default port is 80

nport: Introducing server port, live default port is 3502, vod default port is 3501

If it is the default port, tpport and nport can be omitted, for example:

vjms://ip/

vjms://ip:tpport/

vjms://ip::nport/

/vod/cid=...&hash=...&mime=...&time=...&size=...&bitrate=... For on-demand content, cid Back content from VOD servers. For example:/VOD/CID=1&hash=08a007ff543f66eefbaec610be2f1b48&MIME=RM&bitrate=698000&size=179878680&time=1962. .. To control the start and stop playing the position and a floating- point type, in seconds for example, 100.04 seconds.

IE Play code is shown as follow:

```
<objectid="VJOcx3"classid="CLSID:174012D5-4141-44D6-8F44-729BB97C56EB"
codebase="http://www.nagasoftware.cn/download/vjocx3/vjocx-ch.cab#version=3,0,101,0"
width=640 height=480>
<PARAMNAME="Src"
VALUE="vjms://tracker.nagasoftware.cn:80:3501/vod/cid=2873&hash=a154df3b24da5174d523c5ef8d2b000b&mime=rm&bitrate=400000&size=132603242
```

```
&time=2631|kenyuu_densetsu_yaiba_01-02.rm">
  <PARAM NAME="BufferTime" VALUE="5">
  <PARAM NAME="PlayMode" VALUE="full">
  <PARAM NAME="AutoPlay" VALUE="true">
</object>
```

About the interface in your code, please refer to vjocx3 interface.pdf.

Flash player only support FLV/MP4 files. It works at P2P mode by default (accelerator VJStream is installed and running). If the accelerator is not installed or is not running, it will automatically run directly. Accelerator with IE Activex player plug-in is installed and is set to run automatically. Please refer to the chapter 8 Player for detail.

## 6.3 Directory Manager

Click “VJVD” from server list, then Click “Directory Manager” to open its setting window. You can do operation for it.



### 1) New Publish Directory

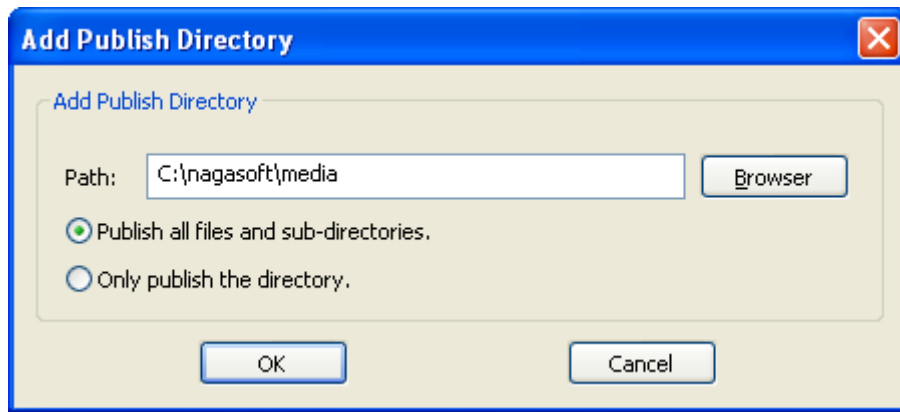
Click “New PublishDir” button then popup new window, click Browser to select a directory on the server to publish.

When a new catalog is created, there are two ways can be selected:

- Publish all files and sub-directories. When you publish the directory, it automatically publishes all sub-directories and all files. This option is enabled by default. Service will automatically monitor the published directories. When you add files, modify or delete files from the current directory, it will automatically publish or un-publish.
- Only publish the directory. When you publish the directory, all sub-directories and all files will not be published automatically, which require to publish manually.

In addition, it supports directly enter the directory path. Please enter the path in “Add Publish Directory” window directly.

After you have set the published path and published way, click OK button to publish the directory.



## 2) Unpublish directory

In the directory list, select a published directory and then click “UnpublishDir” button, you can cancel publish the directory. Meanwhile, all subdirectories and files under this directory will also be unpublished.

Tip: when you select a published directory, right click the directory, select the “Unpublish” . It is the same function with clicking “UnpublishDir”.

## 3) Back To Root.

In any case when making directory management, click “Back To Root” to return to the published list.

## 4) open

Select a directory and then click Open or double click, you can enter into this directory.

## 5) Back

Click “Back” button to return to the parent directory.

## 6) Refresh

Each time you do operation, you must click “Refresh” to to verify whether the operation is successful.

Note: only the published files will be shown more information in the directory list. Otherwise, it will only show the file name, size and date modified.

## 7) Publish

In the directory list select one or more directories or files and click “Publish” button, you can publish them. At this point, if you select is a directory, then all files in a directory will be published.

Tip: select one or more directory or files, right click and select “publish”. It is the same effect with this.

## 8) Unpublish

In the directory list select one or more directories or files and click “unpublish” button to stop publishing. If you select a directory, all files in a directory are canceled publishing

Tip: select one or more directory or file, right click and select “unpublish”, it is the same effect with this.

## 9) Property

In the directory list, select one or more files and click “Prosperities” button, it will show a number of properties that can be set.

- Buffer ad: When the player state in buffer status, it will show this ad in this address. For Eg: "<http://www.nagashare.com/BufferAD.html>".
- Pause ad: When the player state in pause status, it will show this ad in this address. For Eg:" <http://www.nagashare.com/pauseAD.html>".
- Stop ad: When the player state in stop status, it will show this ad in this address. For Eg:" <http://www.nagashare.com/stopAD.html> ".
- Width, height: The width and height for ad display. State empty means default size. The units for width and height are "PX".
- Access Domain Protection: Check it and click "Apply", the function will be enabled. Uncheck it that mean to disable this function.
- Download Protection: Check it and click "Apply" to enable this function. Uncheck it to disable this function.
- Allow user close: Whether allow users to close the ads.
- Max direct connect: connections limit number for users. Fill in 0 is not limited.
- Duration: Set the buffer ad display time. If you input "0" , it mean automatically set 10 seconds for buffer ad display.

When the properties are set, and click "Apply" for apply these function.

## 6.4 Export Manager

Click "JVOD" from server list, then Click "Export Manager" to open its setting window. You can do operation for it.

File List Manager Directory Manager **Export Manager** Monitoring Advertisement Access-C

**Export Type**

☒ By Directory ☐ By Date ☐ By Keyword ☐ All

**Format**

☐ Dir+FileName ☐ FileName ☒ Dir+FileName (FullPath)

**Directory**

Path

- C:/media/3GP
- C:/media/AVI
- C:/media/JPG
- C:/media/MP3
- C:/media/MP4
- C:/media/RMVB

**Date**

Start Date: 2011-10-10 15

End Date: 2011-10-10 15

**Keyword**

Input the keyword(dir name or file name etc.)

Export

Export Manager List

**Step one: select export types.**

There are 4 types to export, namely by directory, by date, by keyword and by all.

- Export by directory: After check it, the “Directory” parameter option is activated. And you can select the desired export directory, which support for multiple selections.
- Export by date: After check it, the “Date” parameter option is activated. You need to fill the time range, and the time is accurate to second.  
Note: The end time must be greater than the start time. Otherwise, this export is invalid.
- Export by keyword: After check it, the “keyword” parameter option is activated. You can fill file name that need export to the directory. And it supports a fuzzy search.
- Export by all: All published files VJMS address are exported.

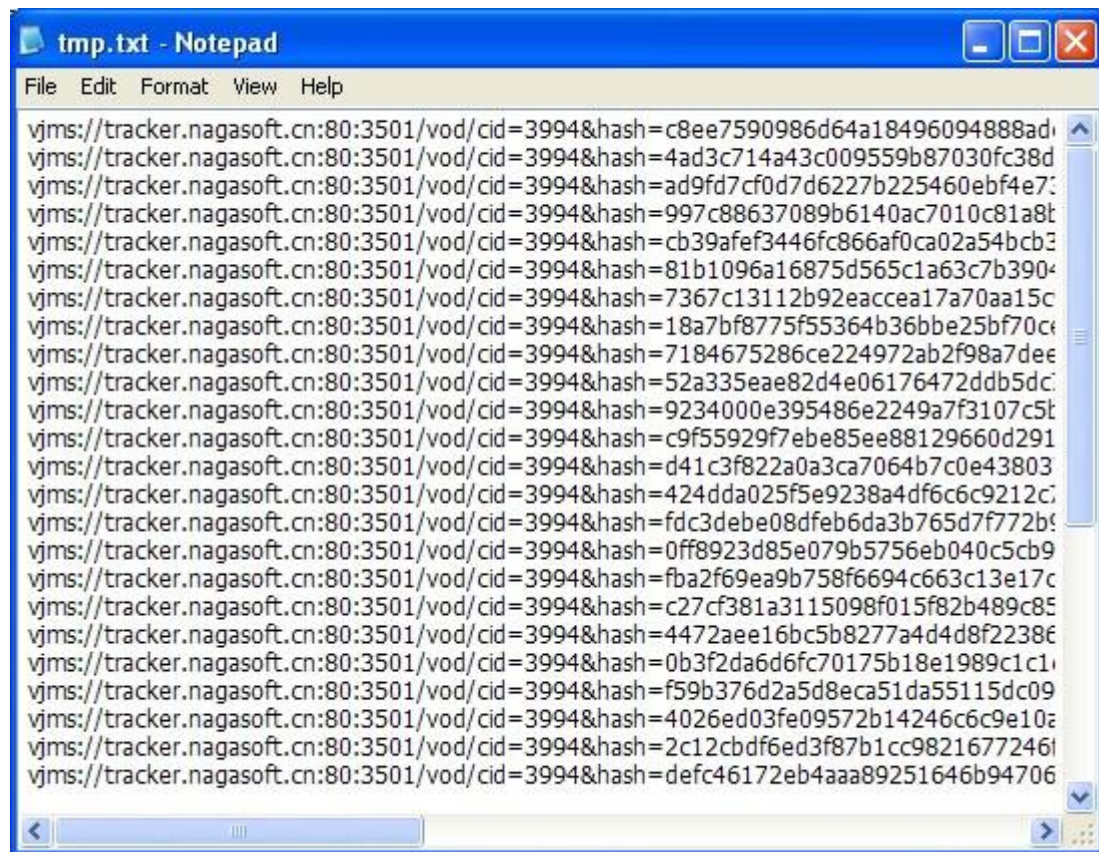
Step two: Select the format:

There are 3 species namely “Directory plus File name”, “File name” and “Directory plus File name (Full Path)”.

- “Directory plus File name”: Add the directory and file name in where the file is located behind the symbol “|” which is in the end of VJMS link address. For Eg, “media/AVI/1.ave.”
- Only File name: Add the file name in where the file is located behind the symbol “|” which is in the end of VJMS link address. For Eg, “media/AVI/1.avi”.
- Directory plus File name (Full Path): Add the directory and file name in where the file is located, and full path behind the symbol “|” which is in the end of VJMS link address For Eg: media/AVI/-1.AVI (c:media/avi/1.avi)”.

Finally, click “Export” button to export vjms link address according to the selected type and format. Shown as below.



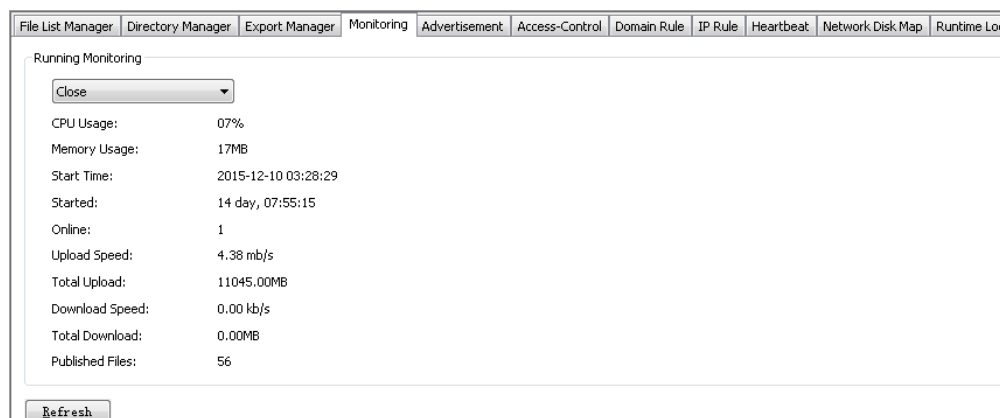


vjms link address by export

## 6.5 Monitoring

Here you can monitor the CPU usage, memory usage, channel start time, channel running time, online persons, current upload speed, total upload, current download speed, total download and the number of publish files.

Click “Refresh” button to refresh data by manual each time. Or you can automatic refresh by selecting refresh time. You can set 1 second, 3 seconds, 5 seconds, 8 seconds or 10 seconds as the refresh interval.





## 6.6 Advertisement

Click “VJVID” from server list, then Click “Advertisement” to open its setting window. You can do operation for it.



When you open first time, there is no Ads. Click “Browser” button to select the advertisement file (vva.file). Click “Edit” button to open advertising editor. When you open the editor, Ads can be edited. If you want to edit the advertisement files, you have to select a advertisement file.

Please refer to Appendix II “Advertising Editor” for the use of advertising editor.

When ads editing are finished, you can click “Browser” button to load the Ad. At last, click “Apply” button to publish the ads.

If you want to remove the published advertisement, just click “Clear” button. Then the ad will be removed.

## 6.7 Access Control

Click “VJVID” from server list, then Click “Access-Control” to open its setting window. You can do operation for it.

Access control can realize the simple encryption, charging encryption and security chain. Setting will valid for all files in the list. There are 3 types of Access Control. They are:

- 1) Simple password. The player will ask user to input password. Fill the password at this area.
- 2) User+Password access control. The player will ask user to input user and password, then post the user and password to the web page which you have set to do check. Fill the URL of the user and passed check web page at this area.
- 3) Domain access control. The player will read the URL of the current page, and then post the access URL to the web page which you have set to do check. Fill the URL of the domain in check web page at this area.

ISP should develop the user+password check web page or the domain check web page according to the format in the SDK document. Refer to Appendix I: Access Control for detail.

## 6.8 Domain Rule

Domain Rules are used to filter the visitor access using P2P/HTTP/RTMP agreement. Find in the domain rule list in order from top to bottom. If found it, it will terminates immediately and return the allow/forbid results. If not, it will return forbid results. Filters protocols can be single or multiple selections.

Domain Rules matching algorithm:

Given access web address (for eg: http:a.b.com /yyy/zzz.jsp). Extract the domain (for Eg: a.b.com) between protocol header “http://” and the first sign “/”, and delete the port together. According to this domain to search the list, it matches for right to left characters without case sensitive. For example:



Domain	Domain Rule	Match
a.b.com	b.com	Matching
b.com	a.b.com	Not Match

Check “Enabled” and then click “Submit” to enable domain rules. Uncheck “Enable” and then click “Submit” to disable it.

Export Manager Monitoring Advertisement Access-Control Domain Rule IP Rule Heartbeat Network Disk Map

☒ Enable

Domain	Allow	Protocols
www.nagasoftware.cn	No	RTMP
nagasoftware.cn	Yes	P2P HTTP RTMP

Add Modify Delete Submit Refresh

#### Source channels domain rules

Domain rule management list:

##### 1) Add

Click “Add” to add the domain name. Enter indicates to filter all domain names.

##### 2) Modify

Select a rule in the rule list and the click “Modify” to modify the rule. If you want to change the location of the rule, you can adjust the location by click “UP” and “Down” button.

##### 3) Delete

Select a rule in the rule list, and then click “Delete” to delete the rule.

##### 4) Submit

Every time you check/uncheck “Enable” or add, modify, delete, adjust the position after the operation, you must click “Submit” to present the results of operations to the server.

##### 5) Refresh

Click “Refresh” to verify the operation result s whether are submitted to the server.



## 6.9 IP Rule

IP rule is used to filter the IP of visitors using P2P/HTTP/RTMP agreement. Find in the IP rule list in order from top to bottom. If found it, it will terminates immediately and return the allow/forbid results. If not, it will return forbid results. Filters protocols can be single or multiple selections.

Export Manager Monitoring Advertisement Access-Control Domain Rule **IP Rule** Heartbeat Network Disk Map

☒ Enable

Start IP	End IP	Allow	Protocols
192.168.0.19	192.168.0.19	Yes	P2P RTMP
192.168.0.1	192.168.0.30	No	P2P HTTP RTMP
192.168.0.32	192.168.0.32	Yes	P2P HTTP
192.168.0.1	192.168.1.1	No	RTMP
121.9.204.103	121.9.205.103	No	HTTP RTMP

Add Modify Delete Submit Refresh

IP rules management:

### 1) Add

Start IP: the filter IP for the start IP.

End IP: the filter IP for the end IP. Filter one IP by setting the same for start IP and end IP.

Allows: Whether allows filtering of IP access to the appropriate protocols.

Protocol: filter protocols. P2P, HTTP and RTMP protocols are available for single or multiple selections.

**New IP Rule**

Begin IP: 192 . 168 . 0 . 1

End IP: 192 . 168 . 0 . 30

Allow: No

Protocol: ☒ P2P ☒ HTTP ☒ RTMP

Ok Cancel

### 2) Modify

Select IP a rule in the rules list, and then click "Modify" to modify the rule. If you want to change the location of the rule, you can adjust by using the "UP" and "Down" button.

### 3) Delete

Select IP a rule in the rules list, and then click “Delete” which one IP rule you want to delete from the list.

### 4) Submit

Every time you check/uncheck the “Enable” or do operation for add, modify, delete, adjust the position, you must click “Submit” to present the results of operations to the server.

### 5) Refresh

Click “Refresh” to verify the operation results whether are submitted to the server.

## 6.10 Heartbeat

Heartbeat function regularly request for a web server to notify the existence of web services, or send UDP packet to UDP server. It is used for count or monitor. The data format is shown below: (Use POST for web server request, and UDP data is inserted in one or more UDP packet)

[local\_ip=]&[onlines=]&[vod\_file\_count=]&[upload\_speed=]

Heartbeat Parameter

Server:

Local ID:

Period:(sec)  ☒ Autorun

☒ Local ID ☒ Onlines

☒ Upload Speed ☒ Publish Files

Server: Use to receive HTTP POST report or UDP packet. Operators need to develop a web page on their own and change the page address in to here. Operators can be timed to get to the service performance parameters reported in this web page.

Local ID: you can enter any content, generally using the IP address in used to distinguish which server to send requests to the web. For example: 192.168.0.31.

Period: the interval time of server request. It is 60 seconds by default.

Auto run: Timed report by automatic. If don't check, it stops timed report.

Preferences: Select the desired parameter provided to the web. There is a local IP, the online users, upload speed, the number of video for VOD.

Upload speed: unit KB/s.

After the above parameters are set, click “Apply” to take effect.

Note: Each parameter is changed, you should click “Apply” to make it effect.

## 6.11 Network Disk Map

Network Disk map is used to map the network path address to local disk which is similar to access the local hard disk. This feature is only available for windows server.

Note: Before using this feature, you need to adjust the service start-up account. This server is run as system account by default. But system account does not have network access right. So you must adjust its right to access the network. “Administrator” account is recommended.

Export Manager

Monitoring

Advertisement

Access-Control

Domain Rule

IP Rule

Heartbeat

Network Disk Map

Runtime Log

Add

Delete

Edit

Refresh

Local Disk	Network Path	User Name	Password	State	
I:	\\192.168.0.19\media	administrator	*****	Connected	
J:	\\192.168.0.19\movies	administrator	*****	Connected	
K:	\\192.168.0.17\media	administrator	*****	Connected	

## 6.12 Runtime Log

By queried VOD channel access log and static log, you can know not only the access situation about IP rules, domain rules and others, but also the status situation about upload speed, memory usage, online number, CPU usage and others. These logs can be exported to generate access and status charts. You can specify a data range for query, such as one day or one month. But the span for the data range for query should not be too large and the log should not be frequently queried.

We recommended you to query in the case of small number of users, otherwise it may affect the performance and reliability of service. The format details are shown in Appendix III: Server Log Format.

Date	Time	Protocols	PeerId	IP Address	File Hash
2011-09-29	16:16:41	P2P	000C29F2AB97@5998XVB	192.168.0.33	a4eaca9f84bf72608b173101e2e7a032
2011-09-29	16:17:43	P2P	000C29F2AB97@5087MQO	192.168.0.33	a4eaca9f84bf72608b173101e2e7a032
2011-09-29	16:22:00	P2P	001FC624EA45@5360KPG	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:22:25	P2P	001FC624EA45@5439OIM	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:23:27	P2P	001FC624EA45@5641QYW	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:23:40	P2P	001FC624EA45@5684JNM	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:24:07	P2P	001FC624EA45@5772WIS	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:24:15	P2P	001FC624EA45@5798XJQ	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:24:40	P2P	001FC624EA45@5879EBM	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:25:34	P2P	001FC624EA45@5056GQM	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:26:40	P2P	001FC624EA45@5275ANN	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:26:49	P2P	001FC624EA45@5304ETB	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:26:58	P2P	001FC624EA45@5330FDY	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:27:07	P2P	001FC624EA45@5359JF	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:27:15	P2P	001FC624EA45@5386LLD	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:27:19	P2P	001FC624EA45@5399YSY	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:27:21	P2P	0022FAA6E55D@5392ROO	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:27:28	P2P	0022FAA6E55D@5415PRQ	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:27:44	P2P	0022FAA6E55D@5467RCY	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:28:00	P2P	0022FAA6E55D@5519TSN	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:28:16	P2P	0022FAA6E55D@5575ABR	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:28:35	P2P	001FC624EA45@5650AVJ	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:28:59	P2P	001FC624EA45@5728DNP	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:29:05	P2P	001FC624EA45@5745UMH	192.168.0.17	b239d55fb347b1ee40af0d0878089873
2011-09-29	16:29:25	P2P	0022FAA6E55D@5797WEP	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:29:32	P2P	0022FAA6E55D@5820UHR	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:29:36	P2P	0022FAA6E55D@5833IHN	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:29:42	P2P	0022FAA6E55D@5853PMB	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:29:50	P2P	0022FAA6E55D@5879EUR	192.168.0.13	939d237c458272377d4205ca574d1...
2011-09-29	16:29:54	P2P	0022FAA6E55D@5895UTJ	192.168.0.13	939d237c458272377d4205ca574d1...

All parameters must be chosen before management, or it will affect the next operation. Four parameters must be chosen, namely Logs, Type, Start time and End time.

Logs: There are two types, namely access log and status log.

Types: There are five types for access log, namely play, close, IP rule, domain rule and push for access log. And there is empty for status log.

Start time: Specifies a date range for log management at start time.

End time: Specify a date range for log management at end time.

Note: end time must be greater than start time, otherwise there is empty for log. After all parameters are selected you can log the following.

### 1) Download



The log files are stored in the log directory of VJVID server installation directory. Click “Download” to download the log files within the date range on the server to the local, and integrate into the local log cache files. The log files is default to download in the directory of “\AppData\Roaming\Nagasoftware\VJSAC\Log”.

## 2) Export log

Click “Export” and choose a directory for the export log file, then click “Save” to save as TXT file.

## 3) Delete log

Click “Delete” to delete the log in queries list and local cache.

## 4) Query log

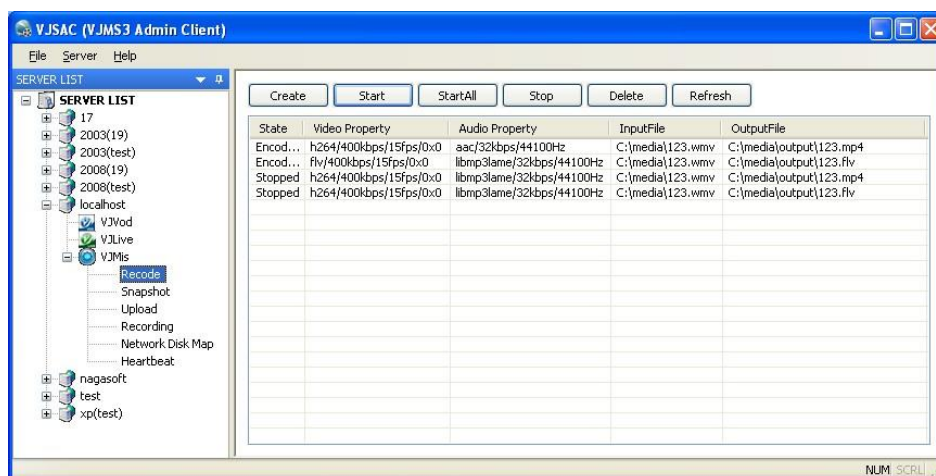
Click Query to download log specified a data time form sever, and then the logs are shown on the list. If there are not local log cache files, it will generate the log cache to the directory of “\AppData\Roaming\Nagasoftware\VJSAC\Log”.

# 7. VJMIS Usages

Click “VJMIS” from a server. Then you can do operation for this.

## 7.1 Recode

You can recode a file from one format to another format. The operations are described as below for detail.



## 1) Create

Click “Create” to add a new encoding task. The pop-up window is shown as below.

**Create Recode Task**

**File Property**

Input File: C:\media\123.wmv

Output File: C:\media\1234.mp4

Input File Property: codec:wmv3/280bps/23fps/320x240

**Encoder Property**

Encoder Mode: h264/aac/mp4 ▼

Video Encoder: H264 Audio Encoder: AAC

Video Bitrate: 400 kbps Audio Bitrate: 32 kbps

Framerate: 15 (1-50,0 for default) Samplerate: 44100 Hz ▼

**Video Resize**

Mode: Default ▼

Width:  Height:

- **File Property**

Click “Browser” to open the directory on the server to select the input video file that you want to recode. Click “Browser” on Output File to set the path to save. You can rename it.

- **Encoder Property**

There are four encode attribute you can choose. The first one is H.264 Encoder and AAC encoder. The file is saved as MP4 type. The second is H.264 Encoder and MP3 Encoder. The file is saved as FLV type. The third one is H.264 Encoder and MP4 Encoder for mixer, AAC encoder for audio. The file is saved as MP4 type. The last one is H.264 encoder and FLV encoder for mixer, MP3 encoder for audio. The file is saved as FLV type. Set the video bit rate, video frame rate, audio bit rate and audio sampling rate.

- **Video Resize**

Select “Default” for the original image size. Or you can customize the size. Finally, click “Add” to finish adding a recode task.

## 2) Start

Select a recode task in the task list. Then click “Start” to run this task.

## 3) Start All

Click “Start All” to start all tasks in the task list.

## 4) Stop

Select a recoding task. Then click “Stop” to stop running this task.

## 5) Delete

Select a recode task. Then click “Delete” to delete this task.

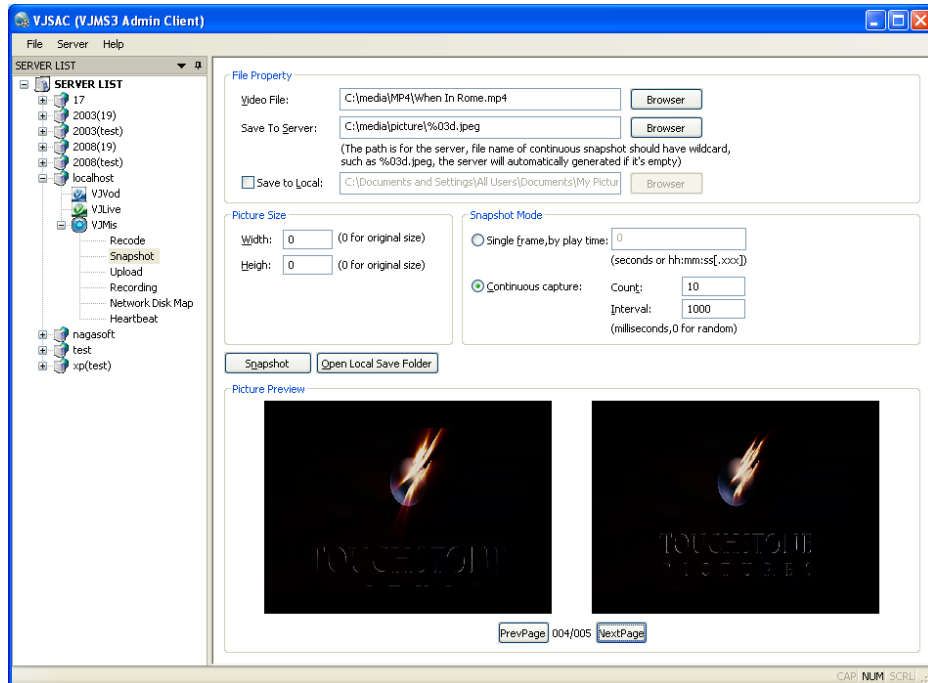
## 6) Refresh



Click “Refresh” that you can refresh the status for task.

## 7.2 Snapshot

You can snapshot one or more pictures from one video. The operations are described as below for detail.



### 1) File property

Click “Browse” on Input File to select the file you want to snapshot. Note that the video file is on the server.

Set the path to save in server path. The snapshot is saved in server disk. For continuous capture, the file name needs wildcards, such as "%03d.JPEG", as 03d means 3-bit integers. The name of final output file will be "001.JPEG, and 002.JPEG" and others. If it is blank, the system will automatically generate numbers to distinguish them. If you want to save to local, check “Save to Local” and set the local path.

### 2) Picture size

Set size for capture. Fill in “0” both for width and height is that you use the video size to capture picture.

### 3) Snapshot Mode

Snapshot mode is divided in two kinds.

The first is a single frame grabbing picture by video playback time. You can fill in the time as the number of seconds, or the clock mode, for example, 00:19:12.001". "001" refers to 12 seconds at the first frame.

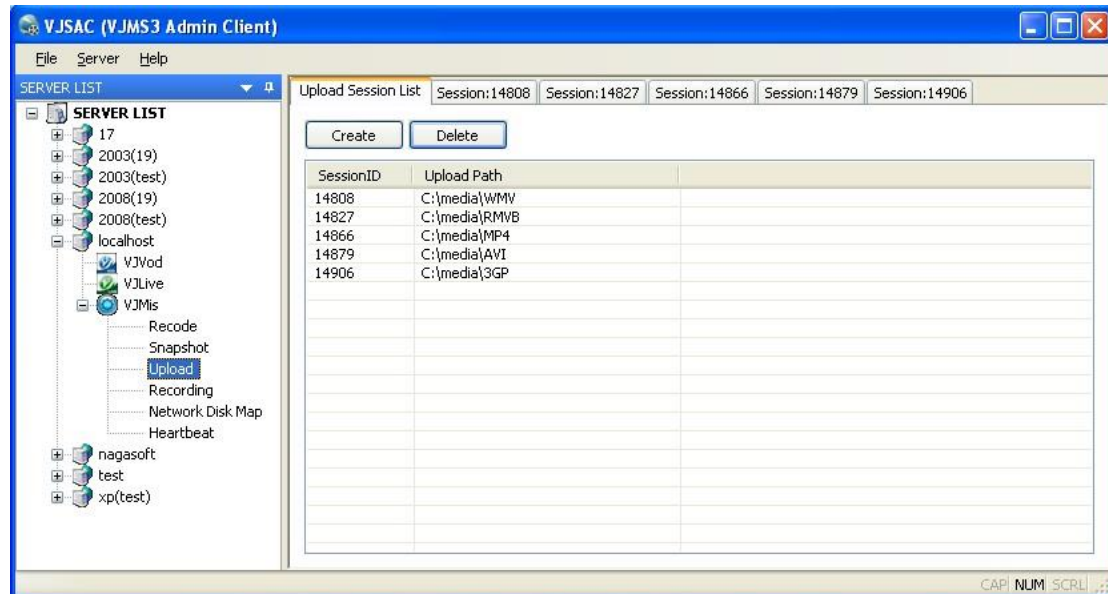
The second one is continuous capture. Set the capture frequency and time interval. Time in milliseconds, set the interval to "0" for random.

### 4) Capture

After completing above three settings, click Snapshot button to start the capture pictures. You can see the captured pictures in preview window. Click “Open Local Save Folder” to open the directory where the pictures are saved.

## 7.3 Upload

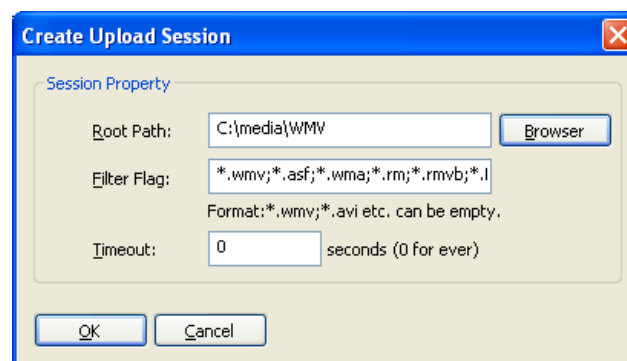
You can upload one or more video to server disk. The operations are described as below for detail.



Before uploading files, you need create a session first. You can create multiple upload session. Each upload session can be set up for different upload directories.

### 1) Create a session

Click "Create" to add a new upload task. The pop-up window is shown as below.



Firstly, set an upload directory which is created on the server. Click "Browse" to choose a directory. Note: not support to fill in manually. It must be an existing root directory on the server

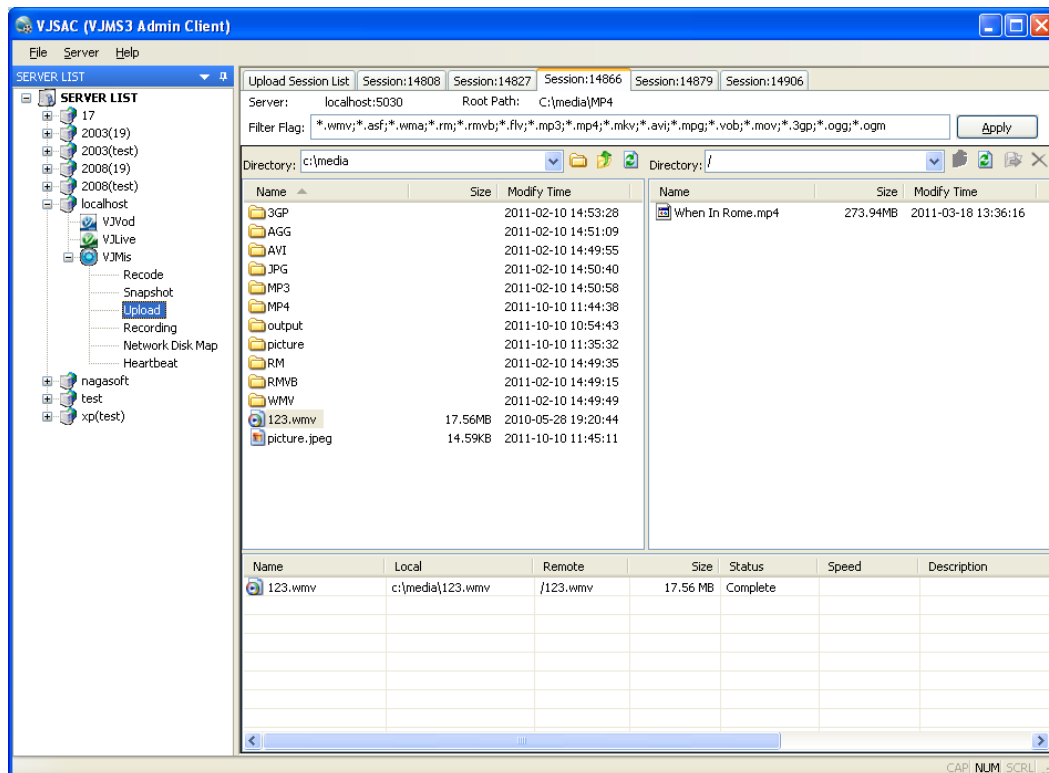
Secondly, set file filters. Only upload the files with the specified suffix format. The format is "\*.WMV;\*.AVI". Remain blank for no filtering.

Finally, set timeout. Fill in "0" for it means without timeout. The timeout function is no more upload tasks in a set time, upload session will be deleted by the server.

### 2) Upload file

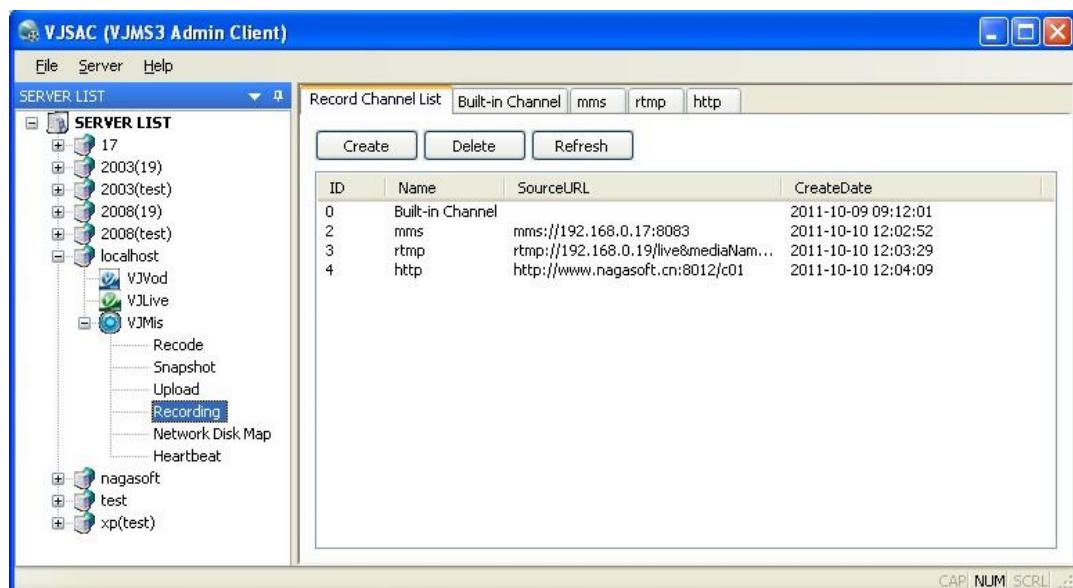
After complete create a session, click "Session: xx" to open the upload window which is shown as below. It is the local directory on the left side, and the server directory on the right side.

Enter the Local path or click “folder Icon” option for the local directory. When you upload a file, you can drag the file onto the server. You can also right click the local video file, and then click “upload” to upload the files.



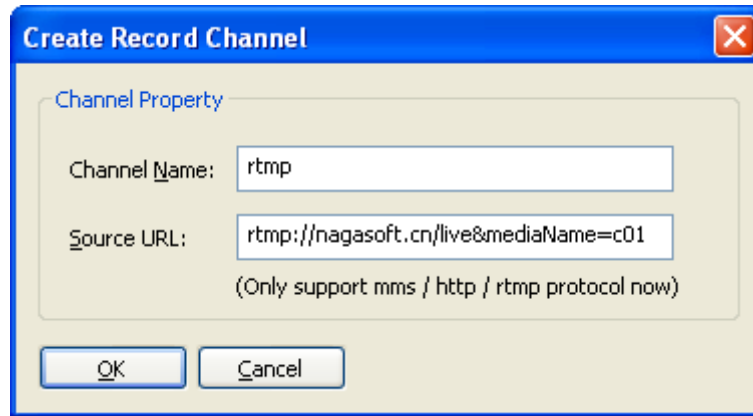
## 7.4 Recording

You can recode one or more videos to server disk. The operations are described as below for detail.



### 1) Create channel

Click “Create” to add a new record channel. The pop-up window is shown as below.



Write a channel name and then write down the recording source URL. The stream address now supports MMS, RTMP, VJMS, HTTP protocol address, for example: "MMS://192.168.0.103:8080", and "rtmp://192.168.0.2/live&mediaName=c01", and "http://192.168.0.2.5021/live/1". Finally click "OK" button.

After that, you can see the record task in the list.

## 2) Manage channel

Channels that are created will be displayed in the window. Click one channel that needs to be managed. Channel managements are to create a task, modify a task, delete a task, start recording and stop recording.

Click "Create task" to create a new task. Please refer to reference 3 for detail.

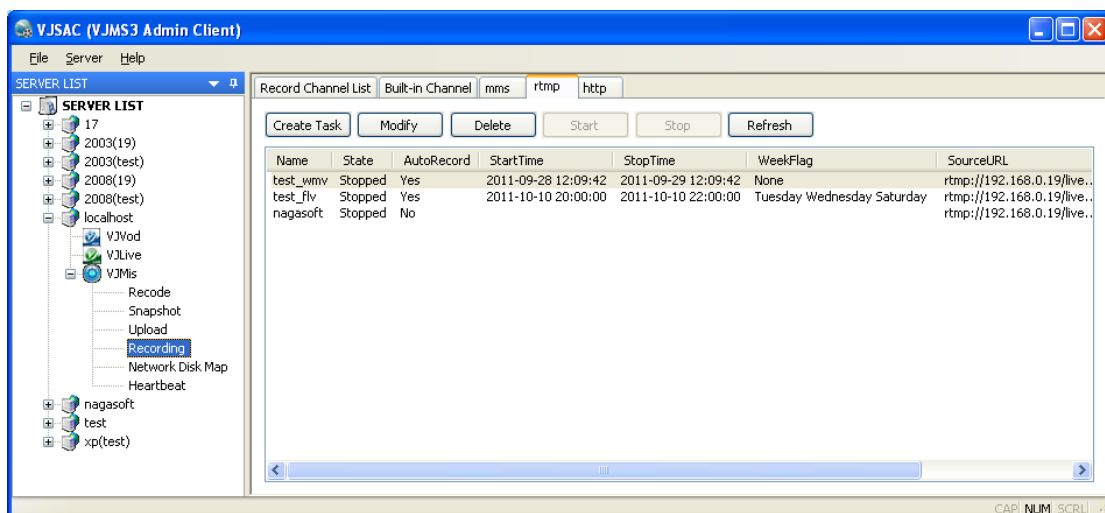
Click "Modify" to modify the selected task.

Click "Delete" to delete the selected task.

"Start" Button is only valid for non-recording tasks automatically. On the automatic recording and non-automatic recording, please refer to the reference 3 "create a recording task".

Click "Stop" to stop the current recording tasks.

For adding a task in the Built-in Channel, you can use different "Recording source URL" addresses. There is an independent URL for each task.



## 3) Create record task

Click "Create Task" to open a create task window which is shown as below.

**Create Record Task**

Task property

☒ Auto Recording

Task Name:

Save Path:

Server full path or relative path, such as /media/123.wmv. Path can contain three wildcards (indicated by %s), the server will automatically replace by the order: the current date, task name, the current time.

Start DateTime:

End DateTime:

Week Flag: ☒ Monday ☒ Tuesday ☒ Wednesday ☐ Thursday  
☐ Friday ☐ Saturday ☐ Sunday ☐ ALL

Source URL:

Support mms and rtmp protocol URL  
rtmp url:  
rtmp://ip:port/[appname]&mediaName=[playpath]

OK Cancel

Auto recording: when checked automatically, you can set the start date time, end data time and week flags. Week flags can be set for each cycle. Check all is to record this for every day.

Task name: Fill in name by custom.

Save path: server full path or a relative path, such as /media/123.WMV. The path can contain three wildcard (indicated by %s), the server automatically replace by order: the current date, task name and the current time.

Note: the format for recoded files is decided by the extension written in the path. And only WMV and FLV format are supported.

For example: task is named for "VJLive". and the path is filled in "/media/%s/%s/%s.wmv". Recording time is "2011-1-19 12:00:00". Final output files will be saved as: "/media/2011-1-19/VJLive/12:00:00.wmv"

If no check "Auto Recording ", it is set up for manual recording task. You need click "Start" button to start recording.

## 7.5 Network Disk Map

Network Disk map is used to map the network path address to local disk which is similar to access the local hard disk. This feature is only available for windows server.

Note: Before using this feature, you need to adjust the service start-up account. This server is run as system account by default. But system account does not have network access right. So you must adjust its right to access the network. "Administrator" account is recommended.

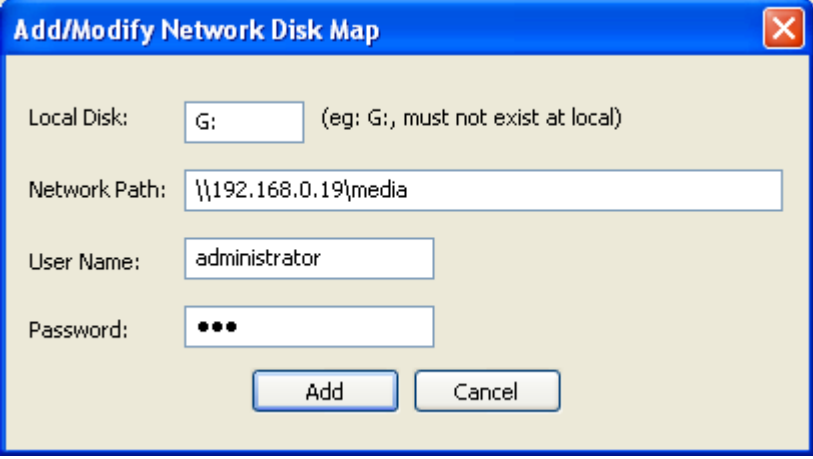
<div> Add Delete Edit Refresh </div>					
Local Disk	Network Path	User Name	Password	State	
I:	\\192.168.0.19\media	administrator	*****	Connected	
J:	\\192.168.0.19\movies	administrator	*****	Connected	
K:	\\192.168.0.17\media	administrator	*****	Connected	

Note: Before using this feature, You need modify the server's service run with an account which has rights to access the network, "Administrator" account is recommended.

Disk management:

### 5) Add

Click "Add" to add a new network disk. The pop-up window is shown as below.



The dialog box titled "Add/Modify Network Disk Map" contains the following fields and buttons:

- Local Disk:** A text box containing "G:" with a note "(eg: G:, must not exist at local)".
- Network Path:** A text box containing "\\192.168.0.19\media".
- User Name:** A text box containing "administrator".
- Password:** A text box containing three dots "..."
- Buttons:** "Add" and "Cancel" buttons at the bottom right.

Local Disk: The path name must be not exist on the target server.

Network Path: Access the network path, for example: [\\192.168.0.19\media](#).

User Name: The login user on the target server is used to connect to the server.

Password: The login password on the target server is used to connect to the server.

### 6) Delete

Delete a network disk map from the disk list.

### 7) Edit

Edit a network disk map from the disk list.

### 8) Refresh

After you do operations as add, delete, edit for disk, click "Refresh" and you can refresh the disk content to verify whether or not the operation was successful. At the same time, we can confirm the network disk connection state.

## 7.6 Heartbeat

Heartbeat function regularly request for a web server to notify the existence of web services, or send UDP packet to UDP server. It is used for count or monitor.

The data format is shown below: (Use POST for web server request, and UDP data is inserted in one UDP packet)

[local\_ip=]

Heartbeat Parameter

Server:

Local ID:

Period:(sec)  ☒ Aautorun

☒ Local ID

Server: operators need to develop a web page on their own and the change the page address in to here. Operators can be timed to get to the service performance parameters reported in this web page.

Local ID: you can enter any content, generally using the IP address for distinguish which server to send requests to the web. For example: 192.168.0.31.

Period: interval server sends request is 60 seconds by default.

Auto run: Check it and the server periodically sends request to the web according to the heartbeat cycle. Uncheck it and stop transmitting.

Preferences: Select the parameter provided to the web. There is a local IP you can select.

After the above parameters are entered, click “Apply” to take effect.

Note: after change parameter each time, you should click “Apply” to make your changes.

## 8. Player

### 8.1 Computer(PC) Play

#### 8.1.1 IE Activex Player

##### 1) Running Environment

Support OS: Win2000, Win XP, Vista, Win7, WIN2008

WEB browser: All IE version browser and other IE kernel browsers.

OS support both 32bit & 64bit

Browser support only 32 bit.

##### 2) Deployments

Installation package is divided into:

- Simple installation packages (VJOcx3-ch-setup.exe). It contains only the accelerator, IE plug-in.
- IE automatically downloads the installation package (vjocx-ch.cab), and content is same with a simple installation package. IE browser will automatically download when used.

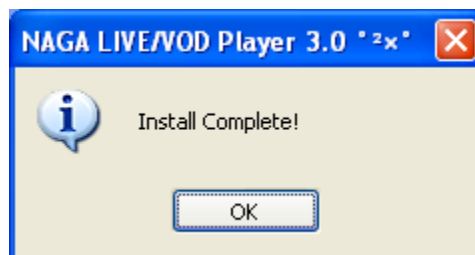
- Expanded codec installation package (VJOcx3-ch-extend-setup.exe). Only contain decoder files.
- Full installation package (VJOcx3-ch-full-setup.exe), contains the accelerator, IE plug-in and decoder files.

Customers with their needs use the appropriate installation package.

### 3) Installation

- a) Open the file .exe for installation process:

Double click for .exe then installation process will start. You can see any windows permission or security appear, then no need to make changes and just click next on next. The install directory is C:\programfiles\nagasoftware\vjocx3 (64-bit systems) and C:\program files(x86)nagasoftware\vjocx3(32-bit systems).



Tip: Add "/s" parameter when running exe, it can be installed without prompting.

Note: the simple installation package does not contain a decoder files, the player from the server in time of need P2P will download extension decoder installation package and install it.

- b) IE automatically downloads the installation package:

You can put code on your own website. Add the code "Codebase=http://nagasoftware.cndownload/vjocs-ch.cab#version=3,0,156,0" for automatically download and install.

### 4) Play

IE plug-in code example:

```
<objectid="VJOcx3"classid="CLSID:174012D5-4141-44D6-8F44-729BB97C56EB"
codebase="http://www.nagasoftware.cn/download/vjocx3/vjocx-ch.cab#version=
3,0,101,0" width=640 height=480>
<PARAM NAME="Src" VALUE="vjms://tracker.nagasoftware.cn/live/cid=1">
<PARAM NAME="StartDelay" VALUE="5">
<PARAM NAME="PlayMode" VALUE="full">
<PARAM NAME="autoplay" value="true">
</object>
```

Copy the code from VJMS3 management client. For more detail, please refer to vjocx3 interface.

### 5) Upgrade

- a) By IE automatically detects the version upgrade, you only modify the address and version of "codebase" to allows user to upgrade.

- b) By the server upgrade information file upgrade:

Deploy update.XML file which is Server upgrade information file to update. The file



contains P2P download information of the latest complete installation package and extend code installation package.

The addresses in upgrade information file are both P2P address. So add file to system first, and then get VOD code “vjms://.....” and change “vjms” to “vjmsd” in code. At last, insert the code into upgrade file.

The default upgrade file is in <http://www.nagashare.com> servers. If users need use their own server to upgrade, add interface code <param name =“updateURL” value=“http://web:prt/updatedir”/> in the web page, and set address to update.XML directory URL. Update.XML is not required to add into. For example, the Update.XML file address is <http://www.nagashare.com/download/update.xml> , the interface code is shown like this, <paramName=“updateURL”value=<http://www.nagashare.com/download/>”/>.

Update. XML format is shown as follows:

```
<?xml version="1.0"?>
<vjmsupdate>
  <vjsetup description=" Version 3.0.609.0<br>1. Updated player upgrade
mode ;<br>2. Modify the upgraded interface ;<br>"
url="vjmsd://tracker.nagasoftware.cn:80:3501/vod/cid=1&hash=aa026ee908630d2
4f42056616c1cd7d6&mime=exe&bitrate=0&
size=6609176&time=0|VJOcx3-ch-full-setup.exe"
md5="FE5715D28F62AB3A88471F4001821495"version="3.0.609.0"
force-update="false">
  </vjsetup>
  <vjcodecs
    Description="codecsfile"url="vjmsd://tracker.nagasoftware.cn:80:3501/vod/cid=1&
mp;hash=5e04130e54356b723855500f3fc51c3c&mime=exe&bitrate=0&a
mp;size=5457624&time=0|VJOcx3-ch-extend-setup.exe"
md5="4B82B996C40734F101A665CAB906AA68" version="3.0.607.0" >
  </vjcodecs>
</vjmsupdate>
```

Format description:

1. “vjsetup” field describes the latest version of installed package information. “description” field will be displayed when users upgrade. “<br>” field represents a new line. “URL” field is the latest version of the P2P download address. “MD5” field is the file’s MD5 code. “version” field is compared with the local version. “force-update” field means whether a force upgrade.
2. “vjcodecs” field describes the information of extended codec installation package. “URL” field is decoder P2P download address. “MD5” field is the file’s MD5 code.

Note: “vjmsd” in the agreement includes & Symbols. This symbol in the XML document must be escape to &amp;. “VJMSED” address is changed from vjms. You can add file to VJVID system, and copy vjms address, then replace vjms as vjmsd.

## 8.1.2 Flash Play (P2P)

### 1) Software Environment

Support OS: Win2000, WinXP, Vista, Win7, Win2008

Browser: All browsers which support Flash player.

It works on both 32 bit & 64 bit OS, only supports FLV and RTMP for live broadcast.

## 2) Deployments

- A) P2P player need accelerators support, so users need to install a simple installation package (with accelerator), and allows the accelerator started at random.
- B) Flash player named VJTVPlayer.swf and play page both put on the web server.

## 3) Installation

Install the simple installation package, or use IE to automatically download.

## 4) Play

- A) In VJMS3 management terminal to copy flash P2P code.
  - Support http protocol of FLV, and F4v, and MP4 files to play, support play RTMP stream.
  - Support VJMS protocol directly connected and accelerator.
  - Support Ad settings. The advertising buffer time can be set.
  - Support dragging the section without download in VOD, but currently only support FLV file.
  - Support full screen.
- B) Play parameters: Flash player thorough parameter named "flashvars" to pass parameters to play the video. Please refer to "VJTVPlayer interface " for detail.
  - src: source address, which support http, vjms and vjmsl address.
  - showlist: whether show program list or not.
  - curl: Get channel list(XML) address.
  - adurl: Get AD list(XML) address.
  - furl: Get relevant list(XML) address. It is used to change definition.
  - point: Get dot info(XML) address.
  - playback: Whether set playback mode or not.
  - usep2p: Whether use accelerator or not.
  - title: Set word in the top menu bar.
  - scale: Set screen ratio by default.
  - pmode: Whether show default list or not.
  - buffer time: Set buffer time. The unit is second.
  - logo: Show in right up on player.
  - language: Set player language.
  - startTime: Set start time to jump. Its unit is second.
  - start: Set start time. The unit is second.
  - end: Set end time. The unit is second.
  - lockControlBar: Whether display control bar or not.
  - related: Get relevant video list(XML) address.
  - adInterval: Set interval for getting vjms ad.
  - verify: Set Verification address.
  - speedurl: accelerator download address.
  - startDelay: Set accelerator delay. The unit is second.

## C) Example

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

```

<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
<title>VJMSPlayer</title>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<style type="text/css" media="screen">
html, body { height:100%; background-color: #000000;}
body { margin:0; padding:0; overflow:hidden; }
#flashContent { width:100%; height:100%; }
</style>
</head>
<body>
<div id="flashContent">
<object classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000" width="720"
height="624" id="VJMSPlayer" align="middle">
<param name="movie" value="VJMSPlayer.swf" />
<param name="quality" value="high" />
<param name="bgcolor" value="#000000" />
<param name="play" value="true" />
<param name="loop" value="true" />
<param name="wmode" value="window" />
<param name="scale" value="showall" />
<param name="menu" value="true" />
<param name="devicefont" value="false" />
<param name="salign" value="" />
<param name="allowScriptAccess" value="always" />
<param name="flashvars" value="src=vjms://tracker.nagasoftware.cn/live/cid=1|c01">
<param name="allowFullScreen" value="true"/>
<!--[if IIE]>-->
<object type="application/x-shockwave-flash" data="VJMSPlayer.swf"
width="720" height="624">
<param name="movie" value="VJMSPlayer.swf" />
<param name="quality" value="high" />
<param name="bgcolor" value="#000000" />
<param name="play" value="true" />
<param name="loop" value="true" />
<param name="wmode" value="window" />
<param name="scale" value="showall" />
<param name="menu" value="true" />
<param name="devicefont" value="false" />
<param name="salign" value="" />
<param name="allowScriptAccess" value="always" />
<param name="flashvars" value="src=vjms://tracker.nagasoftware.cn/live/cid=1|c01">
<param name="allowFullScreen" value="true"/>
<!--<![endif]>-->
<a href="http://www.adobe.com/go/getflash">

</a>

```

```

<!--[if ! IE]>-->
</object>
<!--<![endif]-->
</object>
</div>
</body>
</html>

```

### 8.1.3 Flash play (non-p2p)

#### 1) Software Environment

Support OS: Win2000, WinXP, Vista, Win7, Win2008

Browser: All browser support Flash player.

Its works on both 32bit & 64bit OS. Only supports FLV and MP4 for VOD, rtmp stream for LIVE.

#### 2) Deployments

Flash player named VJTVPlayer.swf and play page both put on the web server.

#### 3) Installation

No need to install.

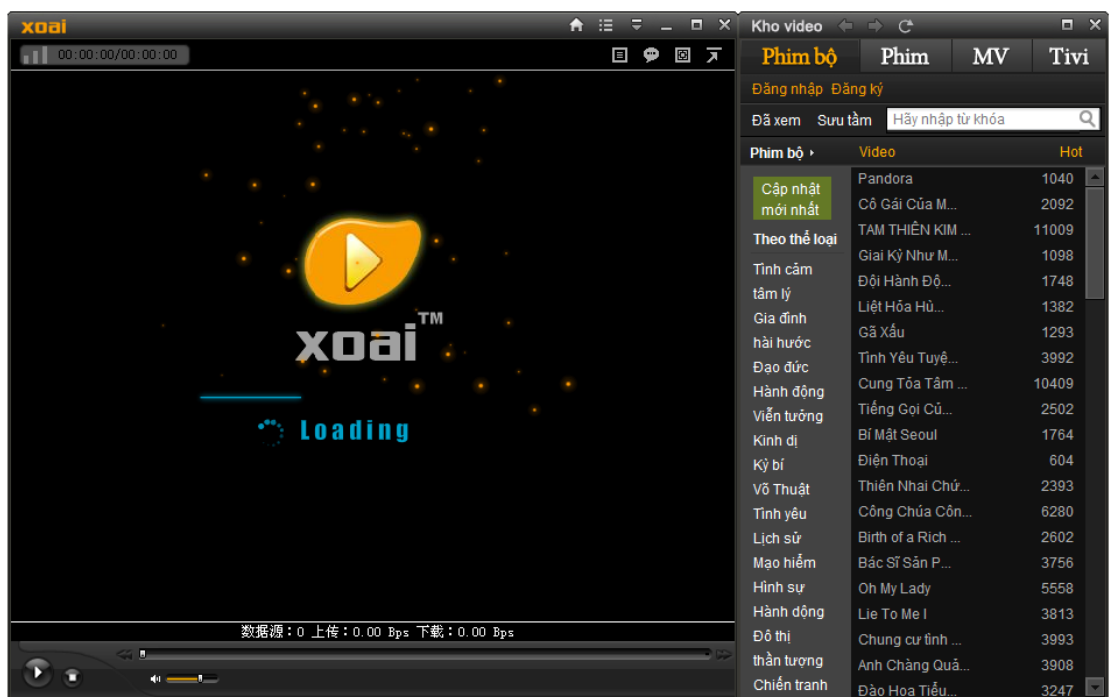
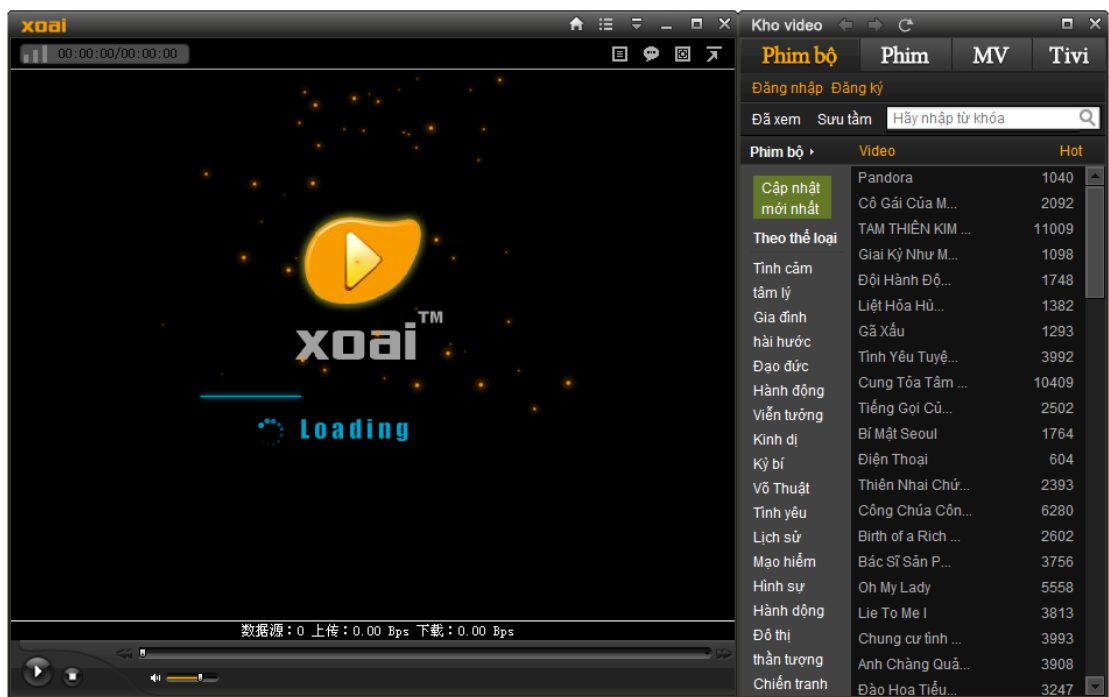
#### 4) Play

- Copy Flash (not P2P) code in VJSAC.
- Parameters refer to P2P Flash Player.

### 8.1.4 Client play

- 1) Users can use VJOcx3 Activex plug-in to develop their own player for the second time. Refer to VJOcx3 interface documentation for detail.
- 2) We can custom for user's interface and features .
- 3) Custom interface example as follow:







## 8.2 STB Play

### 8.2.1 Linux STB

- 1) We currently offer a secondary development of P2P library header files and library files (C/C++). STB vendors can support Naga P2P protocols. IF STB vendors need to compile platform, we will build the library file.
- 2) In the future, we will publish Linux platform players which support most local file play, various network streaming protocols including Naga P2P protocols. We can

compile in to various CPU platforms so that user can call in application level.

### **8.2.2 Android STB**

- 1) We currently offer a secondary development of P2P library header files and library files (C/C++ NDK). STB vendors can support Naga P2P protocols.
- 2) In the future, we will publish Android platform players, which support most local file play, various network streaming protocols including Naga P2P protocols.

## **8.3 Mobile and tablet play**

### **8.3.1 iOS (Iphone/Ipad) play**

- 1) VJLive supports HLS(Apple HTTP Live Streaming).
- 2) VJVod supports HTTP protocol. It supports IOS for vod by using MP4 file.
- 3) In the future, we will release iOS platform players, which support most local file play, various network streaming protocols, including Naga P2P protocols.

### **8.3.2 Android Play**

- 1) VJLive supports HLS(Apple HTTP Live Streaming). It supports to live by Android3.0+ system.
- 2) We supply Flash player in Android, which support FIV file and RTMP stream.
- 3) It supports HTTP protocol for VJVod. It supports file for vod in Android.
- 4) In the future, we will release Android platform players, which support most local file play, various network streaming protocols, including Naga P2P protocols.

## **9. Q&A**

**Q1. When the service is started, prompting “service is started and then stopped”, what is going on?**

A1. There are many reasons for this problem. When you encounter this problem, please view the service “log.txt” file, which lists the service failed to start. Take VJLive service “NAGA VJLive service3” for example. If installed in the default path, the log.txt file is saved in “c:\Program Files\nagasoftware\VJMS3\live\log.txt”. If it is prompted to “invalid license”, the license has expired. About authorization detail, please refer to the chapter 3.5 Server License.

In addition, the push stream port of RED5, Flash media server and VJLIVE is 1935 by default. So RED5 or Flash media server is in the starting state, VJLive service may not start. Please stop RED5 or Flash Media Server first and then start VJLIVE service.

**Q2. When the license is loaded, it indicates “invalid index”, what should I do?**

A2. The cause of the problem there are two, one is the authorization written in index server and in the server configuration do not match the index server, the second is that index server do not started. For First cast, you need to contact us to verify. The second case, you will need to check the index server whether is correctly installed

and started.

Note: When you configure the index server for the service address, the port 8500 must be added behind the bound domain name or IP, as <http://192.168.0.19:8500/cgi-bin/VOD.fcgi>". Otherwise, authorized files cannot be loaded successfully.

**Q3. Prompted "failed to get node", what is the reason?**

A3. First, check VOD or LIVE service whether is starting properly, and check whether the VOD or LIVE channel has expired. For purchasing user, check the index server whether is starting properly. For trial users, please note that VOD channel and LIVE channels is only one day to use.

**Q4. Add file in the live channel and set the file for current play, but it is useless. The next time, you open VJSAC client without the file in the list?**

A4. When you do operation in the live channel, you must click "Save" button to submit the information to the server, otherwise it will cause invalid and the file disappear in the list. Note: each time, after you click "Save" Button, you can click "Refresh" button to verify that the operation has been submitted to the server.

A5.

**Q5. Servers are deployed, and how other peoples view the live or VOD of files?**

A6. VOD code: Right-click a file that has been published in VOD list and select "copy IE play code(P2P)", so you can see file's VOD code.

LIVE code: Select a source channel, and then select "Publish", you can see the "IE Play Code".

Insert the code into web page code, then peoples can view the live or VOD of files.

**Q6. How to upgrade a server program?**

A7. Upgrade server, you need to follow these steps:

1) Backup configuration.

Service	File	Directory
VJLive	Vjlive.cfg, domainrule.cfg, iprule, pushauth.cfg	Channel, log
VJVod	Filelist.db, VJVod.cfg	Log
VJMIs	Config.ini, recodelist.txt, recordlist.txt	Log

Default installation path of the service: C:\programfiles\Nagasoftware\VJMS3

2) Uninstall the old version of the program.

3) Installing a new version of the program

4) The first step of the backup file and directories, copy back to the corresponding directory, overwriting the original file.

5) Starting the service.

6)

**Q7. .How do IOS device play MP4 file?**

A8. Naga VJVOD supports IOS devices by using HTTP protocol to play MP4 file saved in VJVOD root directory. For example, the root directory is set in F:\media, and there is



a MP4 file saved in the path f:\media\mp4\1.mp4, so input the address <http://ip:5011/vod/mp4/1.mp4> in IOS device browser.(The IP refer to VJVID server IP).

#### Q8. How to do if encounter ffmpeg installation stuck during installing?

A9. First, install it as usual. When the installation stuck, use task manager to end the install process.

Second, install package again without choose to install VJMIS.

Finally, under vjmis install directory, run “VJMIService.exe /install” to register service with the command.

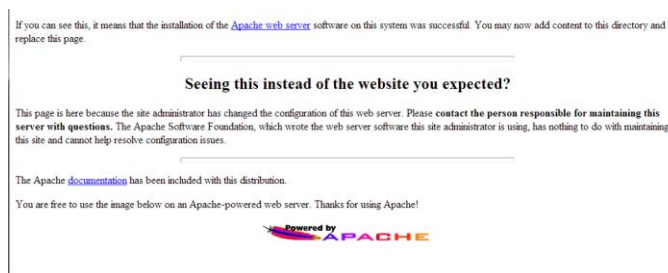
#### Q9. How to test whether the Track Sever is working well after installed.

A10. After installing Track server, it listen the port of TCP 8500, UDP 3501 and UDP 3502.

The steps for test Track server are shown below:

##### 1) Test port TCP 8500

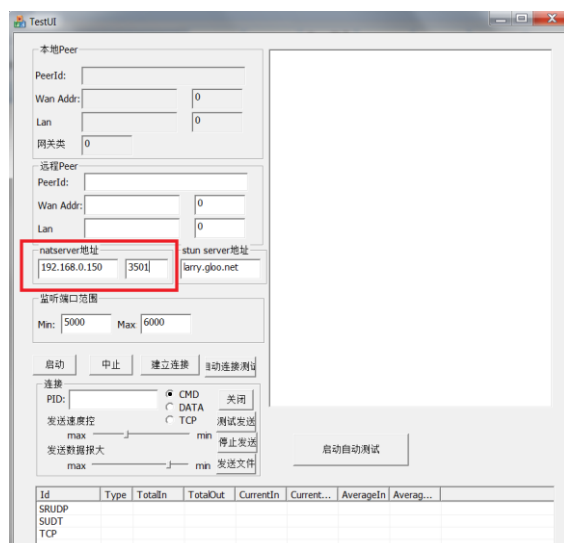
Open the address <http://IP:8500> in browser. The IP is track server IP or domain. If it show apache default web page, it means the server is installed well, which is shown as below.



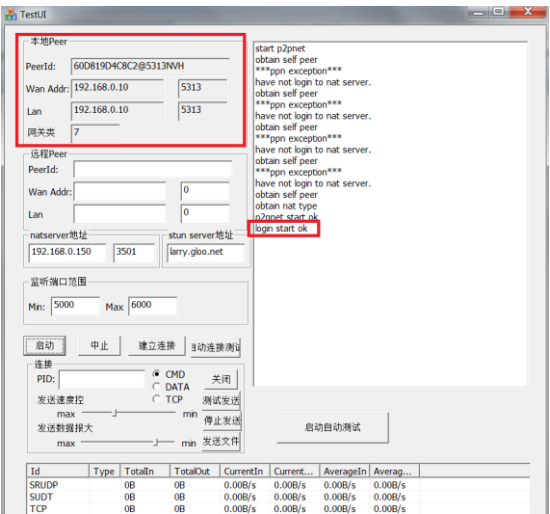
Login the track server computer and open the address <http://localhost:8500> in browser. If it works, it means the server is ok. It may be firewall or network problem.

##### 2) Test port UDP 3501

Download TestUi.exe from <http://nagasoftware.cn/download/TestUI.zip>, and open TestUI.exe.



Replace 192.168.0.150 as track server IP or domain. Click start and wait for a while, it will show information as below:



Check the local IP and internet IP of local peer whether are correct. IF the window is in suspended state, the port cannot connect. Then login the track server computer and run TestUI.ext. Input "localhost" in natserver address. If it can login, it means the server is ok but problem for firewall or network.

- 3) Test port UDP 3502  
Do same operation as step 2.

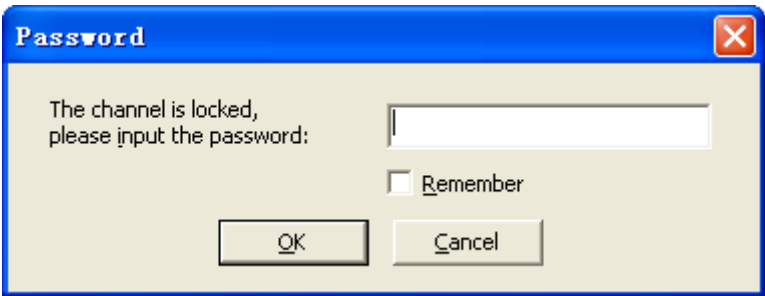
## 10. Appendix

### 10.1 Appendix: Access Control

Access control can effectively protect the live and vod contents which the operators have released against pirate and hotlink. It supports the following access control mode:

#### 10.1.1 Simple password Access Control

Player will be prompted to enter your access password, operators can set the access password in manage terminal of live channel.



#### 10.1.2 User + Password Access Control

Player will prompt the user to enter a user name and password, and submitted the

specified user and password authentication to web page. The operator can manage the server settings to verify the address of the webpage, for example, <http://www.xxx.com/usercheck.jsp>.

Operators can develop authentication web pages according to the following format.

Player submits user name and password entered by the user to verify web page by HTTP POST. Post content format (UTF-8 Encoding) is "user=..&pass=..", which pass field is the MD5 code with 32 upper case letter.

Validation web pages return results by plain/text ways in the following format (UTF-8 Encoding):

```
<result>
<login>success|fail</login>
<reason>...</reason>
</result>
```

If return fails, the player will prompt the information of reason field to the user.



### 10.1.3 Domain Access Control

That player will put the current page URL addresses to the specified validation web page for verification. Operators can manage the server settings to verify Web page address (example: <http://www.xx.com/domain check.jsp>).

Operators can develop validation web pages according to the following format.

Player submits access URL address by HTTP POST to validation Web page. The POST content format (UTF-8 Encoding) is : Url=..., which Url is the current page URL address. For example : <http://www.zz.com/play.jsp?id=123>.

Validation Web pages returns results by plain/text in the following format (UTF-8 Encoding):

```
<result>
<login>success|fail</login>
<reason>...</reason>
</result>
```

If the return fail, the player will prompt the information of reason field to the user.  
The verification page jsp Examples:

```
<%@ page language="java" import="java.util.*" pageEncoding="UTF-8"%>
<%
String url = request.getParameter("url");
```

```
String result = "";
String reason = "";

if (url != null && url.contains("www.paytee.com")) {
    result = "success";
} else {
    result = "fail";
    reason = "please access from www.paytee.com";
}

%>

<result>

<login><%=result%></login>

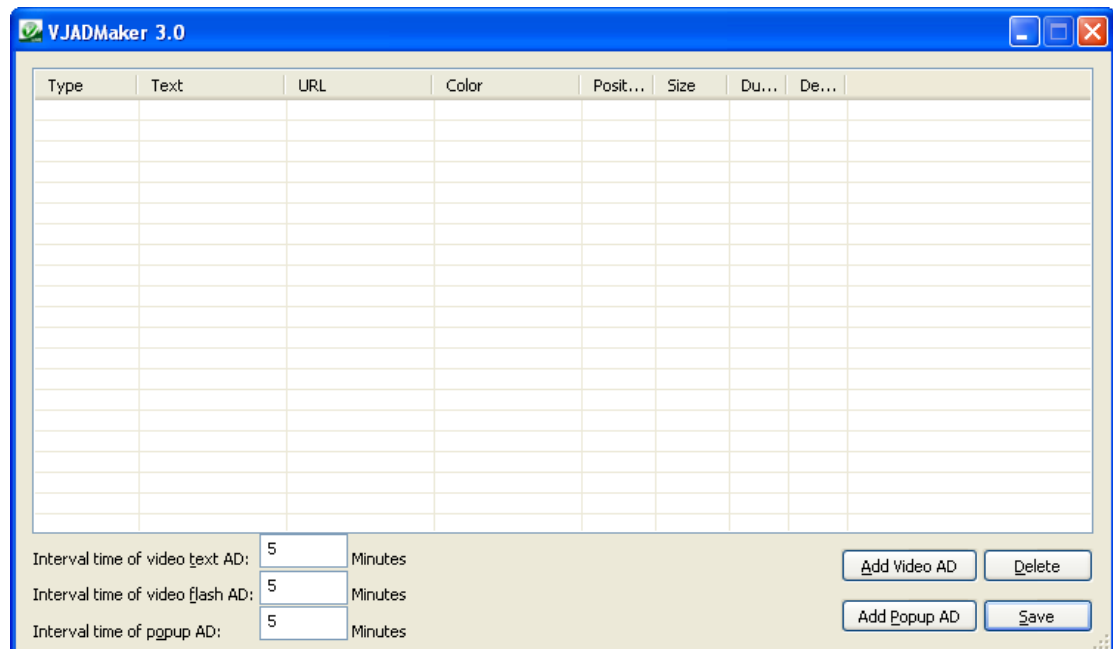
<reason><%=reason%></reason>

</result>
```

## 10.2 Appendix II: Advertising Editor

Independent program of advertising editor is saved in VJSAC installation directory named VJADMaker.exe. In addition, when using the ad management for the first time, click “Edit” to opens the editor.

In advertising editor, you can set up text ads, time between the Flash ads and pop-up ads. After all ads are set, click “Save” to save as advertising file.



### The main window of Advertising Editor

### 10.2.1 Video Ads

Video advertise is divided into 3 types, namely the Pane Text, and Video Text and Video

Flash.

- Pane Text: every once in a while, the text displays on the control bar of plug-in as horizontal scroll by default. If you set the link, click the words to pop up a page.
- Video Text: every once in a while the text displays on the control bar of plug-in as horizontal scroll by default. If you set the link, click the words to pop up a page.
- Video Flash: every once in a while, the video flash displays in the play video box plug-in depending on the setting of position. Display duration can be set in the Advertising Editor.

#### **Adding video Ads Methods:**

- 1) By click “Add AD” in the right corner of the editor or right-click the list of ads in editors to select “Add video” in pop-up window, you can see a pop-up window of AD Information.

**AD Information**

Type: Pane Text

Text: nagasoftware

URL: http://www.nagasoftware.cn

Color: RGB(255,128,64) Select

☐ Use Percent

Position: X 0 Y 0

Size: Width 0 Height 0

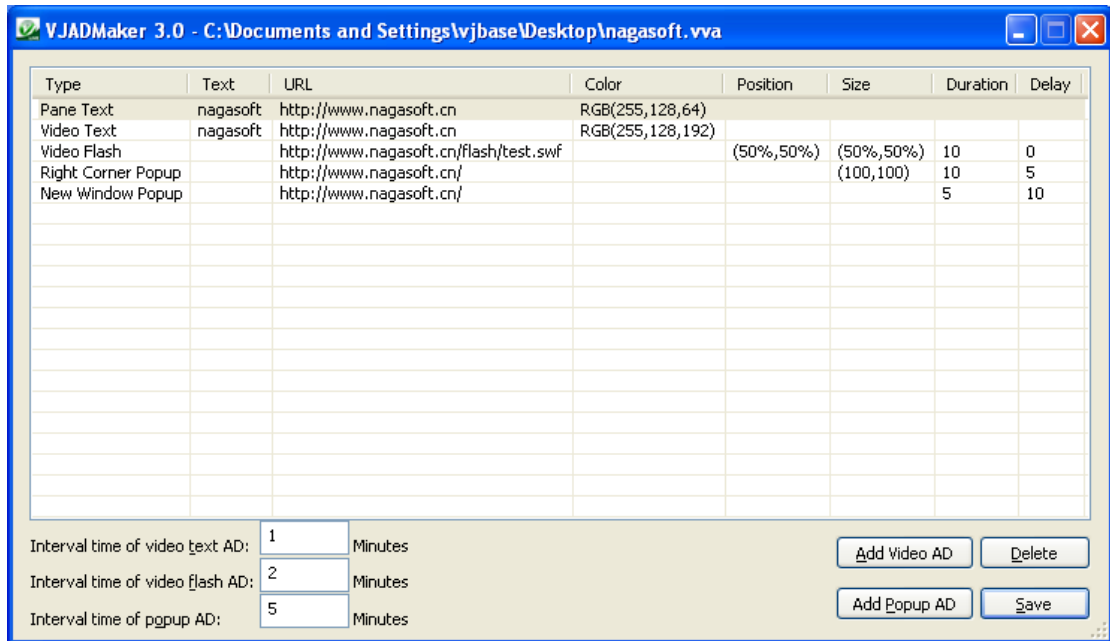
Duration:(seconds) 0 Delay:(seconds) 0

**Tips**  
When no use percent, the position of Video Flash can be negative number.  
eg:When X is negative, flash will be put to the right side of video.

OK Cancel

- Type: There are three types, namely “Pane Text”, and “Video Text” and “Video Flash”.
  - Text: Text for “Pane Text” and “Video Text”. This item is not available for “Video Flash” type.
  - URL: It is used to link the address when users click on ads to jump out. When it is “Video Flash”, the URL is used to link network address what you display ads Flash source. (It must be a SWF address). Tip: The URL links the ads network address you have set.
  - Color: To change the color text for Pane Text and Video Text. When it is “video Flash”, this item is not available.
- (Note: the following argument is only useful for “Video Flash”).

- Use percent: After check it, position will be calculated as a percentage.
  - Position: set "Video Flash" Display position. If not use percentage, it can be set to a negative value. For example, when x is negative, the position X will be calculated from right to left in video box.
  - Size: Set the size of "video Flash". The unit is px.
  - Duration: Set the duration of "video flash ". The unit is second.
  - Delay: Set the delay time of "Video Flash". The unit is second.
- 2) When the above parameters are set, click OK on AD information. The ads are shown in the list.



- 3) If the advertisement is set incorrectly, you can double click the advertising message in the list, or right click an advertising message. Select "modify" in pop-up window and revise the settings of ad.
- 4) Select an advertising message in the list, left click Delete on the right corner of the advertisement editor, or right click an advertising message, you can delete the message from the list.

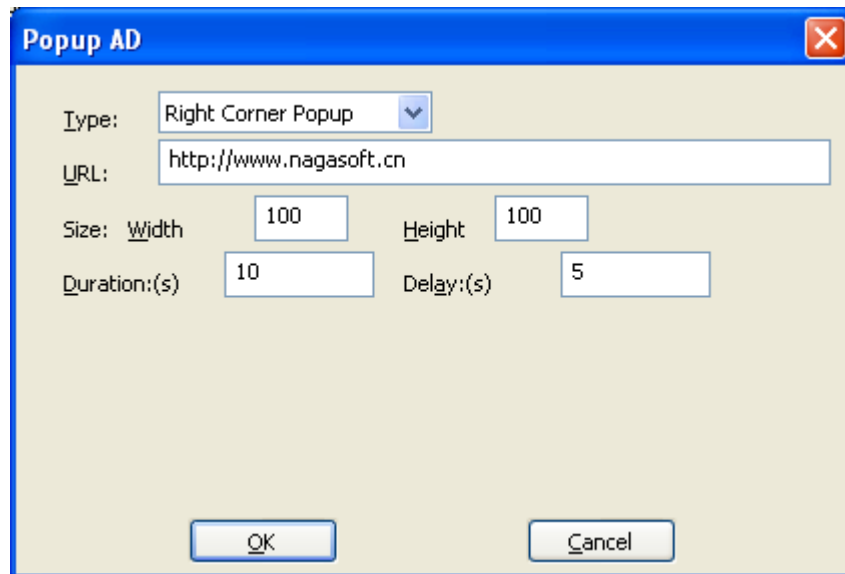
## 10.2.2 Pop-Up Advertising

Pop-up advertisement is divided into 2 types, namely the right corner pop-up and new window pop-up.

- Right corner pop-up: Every once in a while, it will show in the right corner of the screen. Display duration can be set in the advertising editor.
- New widow pop-up: Every once in a while, it will pop up window for the default browser. Widow displays the contents of the advertisement editor settings.

### Add Pop-up Advertising method:

- 1) Click Add Popup AD or right click in the list to select "Add Popup AD to add a popup ad, shown as below:



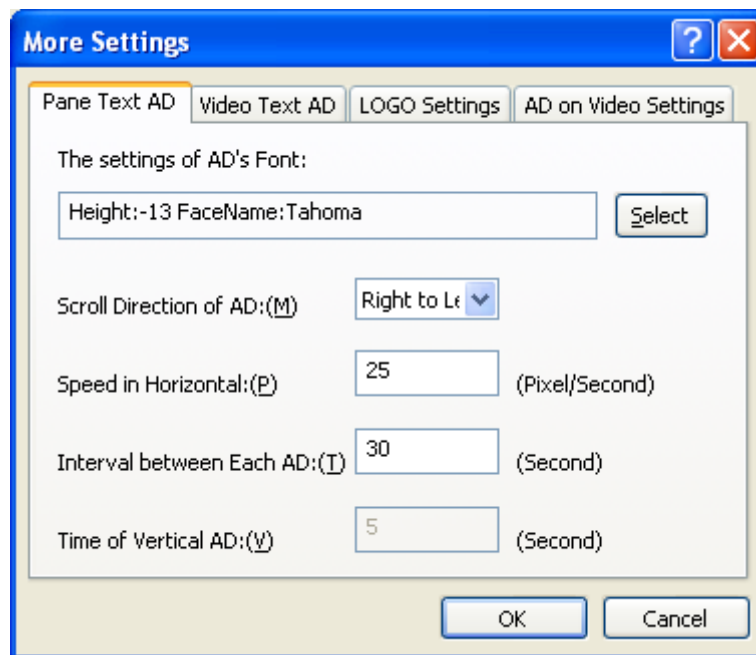
- Type: Select the type of pop-up ad, namely right corner pop-up and new window pop-up.



- URL: Used to connect the network address to pop-up ads.
  - Size: Set ad size, the unit is "PX". When the type is New Window Popup, this item is not valid.
  - Duration: Display the duration of advertising, the unit is second.
  - Delay: Delay the display, the unit is second.
- 2) When the above parameters are set, left OK on Popup AD window. The ad will show in the editor list.
  - 3) If the advertisement is set incorrectly, you can double click an advertisement in the list, or right click on advertise, select "Modify" to revise the settings of the advertisement.
  - 4) Select an advertising message in the list, click "Delete" to delete current ad, or right click an advertising message, select "Delete" to delete it.

### 10.2.3 Advance Configuration

Right click in the ads list to select "more settings", you can open Advance configuration window. Advance configuration is divided in to 4 parts, namely Pane Text AD, Video Text Ad, LOGO Settings, AD on Video Settings.



### 1) Pane Text AD

The following details are various parameters:

- The settings of AD's Font. Modify the size of font.
- Scroll mode. There are two types for Right to Left and Up to Down.
- Speed in horizontal. It is valid when scroll mode is Right to Left. Its unit is pixels per second.
- Interval. Intervals between two ad shows. It is valid when scroll mode is Right to Left. Its unit is second.
- Time of Vertical AD. Control bar text travel time. It is valid when scroll mode is Up to Down. Its unit is second.

### 2) Video Text AD

The following details are various parameters:

- The settings of AD's Font. Modify the size of font.
- Scroll mode. There are two types for Right to Left and Up to Down.
- Speed in horizontal. It is valid when scroll mode is Right to Left. Its unit is pixels per second.
- Interval. Intervals between two ad shows. It is valid when scroll mode is Right to Left. Its unit is second.
- Time of Vertical AD. Control bar text travel time. It is valid when scroll mode is Up to Down. Its unit is second.

### 3) Logo Settings

Set logo on the player control bar. Only input URL of LOGO for PNG, jpg and swf format.

### 4) AD on video Settings

The following details are various parameters:

- Buffering time: The display time of buffering Ad, only valid for buffering Ads.



- Allow to close: Whether allow the user to close ads.
- Buffer Ad: When the player is in "Buffer" status, the ads will be shown. For example: <http://www.nagashare.com/BufferAD.html>.
- Pause Ad: When the player is in "Pause" status, the ads will be shown. For example: <http://www.nagashare.com/pausedAD.html>.
- Stop Ad: When the player is in "Stop" status, the ads will be shown. For example: <http://www.nagashare.com/StopAD.html>.
- Width, Height: the width and height for all kinds of advertising. If it is empty, it means default size. The unit for them is "PX".

## 10.3 Appendix III: Server Log Format

There are two log formats: Access log, status log. Each log format is recorded in a folder. The files are named with date, such as 2009-02-24. Each record stands one row and use "\n" to delimiter.

Access log resource access is saved in the access folder.

VOD server Access log format:

Play: date time [PLAY] Protocol visitors identify IP address file hash identifies the file path to success (1|0)

Referrals: date time [CLOSE] Protocol visitor identification

IP rule: date time [IPR] Protocol visitors identify IP addresses allows the prohibition (1|0)

Domain name rules: date time [DMR] Protocol visitors identify IP address domain name allows the prohibition (1|0)

The agreements include P2P/HTTP, visitor identified in the P2P Protocol is peerID, other protocols use IP addresses.

For example:

```
2009-03-1310:37:15[PLAY]P2P00E04D456BE7@5216QHY125.31.197.217b1d76323a625
f34fd12d871597eadcbf"f:\media\[ cheap Fortuna ][07-04-20].wmv" 1
2009-03-13 10:50:30 [CLOSE] P2P 00E04D456BE7@5216QHY
```

VOD server Status log format:

Date time number of upload bandwidth (MB/s) total upload volume (MB) download bandwidth (MB/s) total download volume (MB) CPU usage (%) Memory usage (MB)

For example:

```
2009-03-1310:37:15123120.431102310.12380012450
```

Live Server Access log format:

Play: date time [PLAY] Protocol visitors identify IP address channel ID a publishing point name provides data source (1|0)

Referrals: date time [CLOSE] Protocol visitors identify the publishing point name

Stream: date time [PUSH] Protocol visitors identify channel ID name of the publishing point plug-flow user name prohibited (1|0)

IP rule: date time [IPR] Protocol visitors identify IP address publishing point name allows the prohibition (1|0)

Domain name rules: date time [DMR] Protocol visitors identify IP address domain name a publishing point name allows the prohibition (1|0)

The agreements include P2P/HTTP/RTMP, visitor identified in the P2P Protocol is peerID, other protocols use IP addresses.

For example:

2009-03-13 10:37:15 [PLAY] P2P 00E04D456BE7@5216QHY 125.31.197.217 1 ch1 1

2009-03-13 10:50:30 [CLOSE] P2P 00E04D456BE7@5216QHY ch1.

Live Server Status log format:

Channel: date time 1 channel ID number of the publishing point name direct connect number maximum number of direct upload bandwidth (MB/s) total upload volume (MB) download bandwidth (MB/s) total download volume (MB)

Server: date time 0 the number of upload bandwidth (MB/s) total upload volume (MB) download bandwidth (MB/s) total download volume (MB) CPU usage (%) Memory usage (MB)

For example:

2009-03-13 10:37:15 1 2 ch2 123 50 50 80.123 23 12.456 13

2009-03-13 10:37:15 0 200130.234100020.12312011300.