

# **EZserver Internal File Structure**

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## Content

1.	Configuration File (ezserver_config.txt) .....	3
2.	Domain Name Server File (ezt_dns.txt) .....	5
3.	Channel Definition (channel_definition.xml) .....	5
4.	Channel package (group_definition.xml).....	6
5.	Subscriber Profile Definition (user_profile.xml) .....	7
6.	Subscriber point log (user_point_log.xml).....	8
7.	Subscriber video watching log (user_watch_log.xml) ..	9
8.	Movie Point Definition (media/eml/movie_fee.csv).....	10

## 1. Configuration File (ezserver\_config.txt)

ezserver\_config.txt is for system configuration and initialized in the ezserver booting time

<pre> path=. startmenu=index.htm iptv_base_port=5544 http_base_port=18000 http_apps_port=17000 time_zone_diff=0 httpport=8000 rtmpport=1935 igmpip=0.0.0.0 igmpport=9000 network_interface=eth0 iptv_time_shift_record_duration=5 tv_on_demand_record_duration=60 bitrate_constant=0 system_log=1000 user_authorization=1 channel_input_buffer_no=8000 channel_reconnection_interval=7 cache_on_demand_channel=0 stop_ch_cache_interval=10 hls_enable=0 hls_target_duration=10 alert_player_duration=5 blacklist=0 ovp_player_register=0 videopath=media/videos picturepath=media/pictures runningtextpath=media/runningtext </pre>	<p><b><u>Streaming Ports</u></b></p> <p>iptv_base_port=5544 (for RTSP Streaming Video)</p> <p>http_base_port=18000 (for Web Panel)</p> <p>http_apps_port=17000 (for Apps)</p> <p>httpport=8000 (for HTTP Streaming Video)</p> <p>rtmpport=1935 (for RTMP Streaming Video)</p> <p>igmpip=0.0.0.0 (for Multicast IP)</p> <p>igmpport=9000 (for Multicast Port)</p> <p><b><u>Streaming Pre-buffer no.</u></b></p> <p>channel_input_buffer_no=8000</p> <p><b><u>Network Interface (value: eth0, eth1,... or venet0:0 for VPS)</u></b></p> <p>network_interface=eth0</p> <p><b><u>DVR record duration (unit: min)</u></b></p> <p>tv_on_demand_record_duration=60</p> <p><b><u>Bitrate constant</u></b></p> <p>Bitrate_constant=0</p> <p><b><u>System log lines</u></b></p> <p>system_log=1000</p> <p><b><u>User Authorization</u></b></p> <p>user_authorization=0/1/2</p> <p>0: No Authorizaiton</p> <p>1: User/Password mode</p> <p>2: Top-up Card mode</p> <p><b><u>channel input buffer no</u></b></p> <p>channel_input_buffer_no=8000</p> <p><b><u>channel reconnection interval (unit: second)</u></b></p> <p>channel_reconnection_interval=7</p>
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Notes:

- **iptv\_base\_port=0** : Disable RTSP Video Streaming Server
- **rtmpport=0** : Disable RTMP Video Streaming Server
- **igmpip=0.0.0.0** : Disable Multicast Streaming Server

- **Bitrate\_constant** is for SD/HD Streaming, its value is between 0.0 and 0.99, the value >0.5 is for HD.
- **system\_log** is for log line no, ex. 1000 means 1000 log lines in log/system.log, if 1 means ezserver will write the all log in log/system.log, if 0 means no any log in log/system.log
- **channel\_input\_buffer\_no** is for channel input cache, ex. 8000 means  $1524 \times 8000 = 12M$  bytes in the cache each channel.
- **channel\_reconnection\_interval** is for input reconnection interval, if omitted, ezserver will use default value for reconnection. ex. `channel_reconnection_interval = 7`, when the channel input is disconnected, then ezserver will reconnect the input stream after 7 seconds.
- **cache\_on\_demand\_channel** : if its value is 1, then when a player wants to watch a channel, ezserver verifies the channel if is cached in memory. if the channel is cached, then ezserver streams the channel video from the cache to the player. If the channel is not cached, ezserver opens a connection to the input server and gets the video into cache memory, then ezserver streams the channel video from the cache to the player. Once, there is no any player to watch the channel, ezserver stops the connection of input server in order to save the incoming bandwidth of ezserver. If its value is 0, ezserver does not stop the connection of input server to get the video into cache memory.
- **stop\_ch\_cache\_interval** (unit: min.): is defined for `cache_on_demand_channel=1`. Once, there is no any player to watch the channel, ezserver stops the connection of input server after `stop_ch_cache_interval` value. For example, its value is 10 min, then ezserver stops the connection of input channel after 10 min.
- **blacklist** = 0/1 : disable/enable blacklist function.
- **hls\_enable**= 0/1 : disable/enable Channel HLS Streaming function. There are two ways to enable HLS output streaming for channels , one is to set `enable=1` for all channels, or login panel to set one channel type to HLS type even `hls_enable= 0`.
- **hls\_target\_duration** = xxx : set the duration (seconds) of each chunk segment.
- **alert\_player\_duration** = xx.x : set alert hours for connected players. The default vaule is 5 hours. It means if the player has been watching the same channels after 5 hours, it will be listed in Alert Player window that supports Stop and Block buttons.
- **user\_watch\_log**= 0/1 : disable/enable the log of user watching behavior into log folder.

## 2. Domain Name Server File (ezt\_dns.txt)

ezt\_dns.txt is for DNS server IP.

```
<dns_ip>8.8.8.8</dns_ip>
```

## 3. Channel Definition (channel\_definition.xml)

channel\_definition.xml is for the definition of a channel.

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<ch src="rtmp://213.205.104.131/f24_live/f24_livear" category="PC,Android" type
="dvr">RTMPLink</ch>
<ch src="rtmpencoder" category="PC,Android-Adobe_FME">robert</ch>
<ch src="dir://media/videos/Movie" category="iPhone,iPad-HTML5">TSPlaylist</ch>
<ch src="rtp://7001" category="iPhone,iPad-HTML5">TSLiveEncoder</ch>
<ch src="http://192.168.0.7/ch1" category="iPhone,iPad-HTML5">SatelliteTV</ch>
<ch src="udp://9001" category="iPhone,iPad-HTML5">MutlicastEcnode</ch>
```

**<ch>** tag supports src, category, rec\_folder options.

**src** option has

For RTP/UDP/HTTP/RTMP/Playlist input.

- RTP syntax : "rtp://port\_no"
  - rtp://7001
- UDP syntax : "udp://port\_no"
  - udp://7001
- RTMP syntax : "rtmp://url"
  - rtmp://207.182.149.36/live/live1
- HTTP syntax : "http://ip:port\_no/path"
  - http://172.16.10.51:7001/1.ch
- Playlist syntax : "dir://folder\_path"
  - dir://media/videos/Movie.

A administrator needs to upload **MPEG2/H264 TS** video into the folder. And the playing sequence of videos is by alphabetical order.

**category** option is defined for the category of a channel

**type** option is defined for live, dvr, inactive or delay time.

**Channel Name** is defined between <ch> and </ch>

## 4. Channel package (group\_definition.xml)

group\_definition.xml is to group the channels

```
<?xml version="1.0" encoding="iso-8859-1" ?>
/* Group Name */
<group name="basic">
/* Allowed Channel No. */
<channel>1</channel>
<channel>2</channel>
<channel>3</channel>
</group>
/* Group Name */
<group name="sliver">
/* Allowed Channel No. */
<channel>1</channel>
<channel>2</channel>
<channel>3</channel>
<channel>4</channel>
</group>
/* Group Name */
<group name="golden">
/* Allowed Channel No. */
<channel>1</channel>
<channel>2</channel>
<channel>3</channel>
<channel>4</channel>
<channel>5</channel>
</group>
```

## 5. Subscriber Profile Definition (user\_profile.xml)

user\_profile.xml is for the definition of a subscriber

```
<?xml version="1.0" encoding="iso-8859-1" ?>
/* copy the user profile from file to memory per 60 min*/
<refresh>60</refresh>
<userid>root</userid>
<password>1234</password>
/* group is for allowed channel*/
<group>golden</group>
/* for channel expired time*/
<channel_expired_time>12/31/2013</channel_expired_time>
/* vod mode: free, post (increase ppv point per movie), pre (subtract ppv pint per movie) */
<pay_per_view>free</pay_per_view>
/* current vod point */
<ppv_point>2000</ppv_point>
<smart_phone>0988888888</smart_phone>
<tablet>001122334455</tablet>
<desktop>112233445566</desktop>
<tv>112233445566</tv>
<first_name>Admin</first_name>
<last_name>Admin</last_name>
<address>13F-1, No.189,Sec. 2 , Keelung Rd</address>
<city>Taipei</city>
<zip>110</zip>
<tel>02-27354224</tel>
<email>sales@ezometech.com</email>
```

## 6. Subscriber point log (user\_point\_log.xml)

user\_point\_log.xml is to log the watched movie and points

```
<ChargeTime>12/12/2013 15:08:34</ChargeTime>
<IP>192.168.0.2</IP>
<Username>root</Username>
<Movie>/ezhomotech/development/SSP/package/Server
Applications/ezserver/bin/release/testing/ezserver/middleware/videos/Sports/1.mp4</Movie>
<MoviePoint>100</MoviePoint>
<PrevPoint>900<PrevPoint>
<CurrnetPoint>800<CurrnetPoint> /* 900-100=800 */
<ChargeTime>12/12/2013 15:08:34</ChargeTime>
<IP>192.168.0.3</IP>
<Username>robert</Username>
<Movie>/ezhomotech/development/SSP/package/Server
Applications/ezserver/bin/release/testing/ezserver/middleware/videos/Sports/2.mp4</Movie>
<MoviePoint>150</MoviePoint>
<PrevPoint>900<PrevPoint>
<CurrnetPoint>750<CurrnetPoint> /* 900-150=750 */
<ChargeTime>12/12/2013 15:08:34</ChargeTime>
<IP>192.168.0.4</IP>
<Username>susan</Username>
<Movie>/ezhomotech/development/SSP/package/Server
Applications/ezserver/bin/release/testing/ezserver/middleware/videos/Sports/3.mp4</Movie>
<MoviePoint>200</MoviePoint>
<PrevPoint>900<PrevPoint>
<CurrnetPoint>700<CurrnetPoint> /* 900-200=700 */
```

## 7. Subscriber video watching log (user\_watch\_log.xml)

user\_point\_log.xml is to log the watched movie and points

```
/* VOD log */
/* starting log*/
<StartingTime>12/12/2013 15:08:33</StartingTime>
<IP>192.168.0.2</IP>
<Username>root</Username>
<Movie>ezhomotech/development/SSP/package/Server
Applications/ezserver/bin/release/testing/ezserver/middleware/videos/Sports/1.mp4</Movie>
<Duration_Sec>54</Durration_Sec>

/* end log */
<EndTime>12/12/2013 15:08:34</EndTime>
<IP>root</IP>
<Username>root</Username>
<Movie>ezhomotech/development/SSP/package/Server
Applications/ezserver/bin/release/testing/ezserver/middleware/videos/Sports/1.mp4</Movie>

/* IPTV log */
/* starting log */
<StartingTime>12/12/2013 15:08:22</StartingTime>
<IP>192.168.0.5</IP>
<Username>robert</Username>
<Channel>2</Channel>
/* end log */
<EndTime>12/12/2013 15:08:25</EndTime>
<IP>192.168.0.5</IP>
<Username>robert</Username>
<Channel>2</Channel>
```

## 8. Movie Point Definition (media/eml/movie\_fee.csv)

Movie\_fee.csv is to define movie path and points

```
refresh time,60,min
/* Movie path, Movie point */
/media/videos/Movie/mp4/1.mp4,2
/media/videos/Movie/mp4/2.mp4,3
/media/videos/Movie/mp4/3.mp4,4
/media/videos/Sports/mp4/1.mp4,3
/media/videos/Sports /mp4/2.mp4,3
/media/videos/Sports /mp4/3.mp4,2
/media/videos/Kids/mp4/1.mp4,4
/media/videosKids/mp4/2.mp4,2
/media/videos/Kids/mp4/3.mp4,4
```