



# Multicast SDK Guideline

Integrate mcast encryption codes into your app

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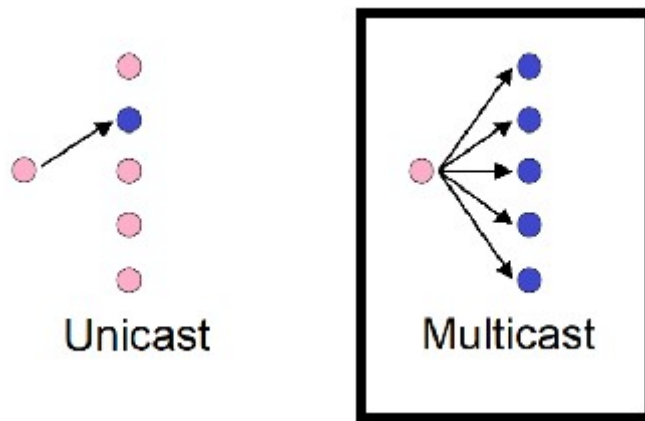
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## 1 Overview of Multicast SDK

Multicast SDK lets your app includes Multicast Encryption codes to play channels from Ezserver Enterprise via UDP encryption protocol.

1. **Ezserver Enterprise:** Act Multicast video server
2. **Multicast Players:** **Multicast encryption player.**



### 1.1 Related Information

Ezserver Forum:

<https://ezserver.createaforum.com/>

Ezserver Server API website

[http://www.ezhometech.com/html/server\\_api.html](http://www.ezhometech.com/html/server_api.html)

Ezserver Client API website:

[http://www.ezhometech.com/html/client\\_api.html](http://www.ezhometech.com/html/client_api.html)

Ezserver User Guide website:

[http://www.ezhometech.com/html/ezserver\\_user\\_guide.html](http://www.ezhometech.com/html/ezserver_user_guide.html)

Ezserver Player User Guide:

[http://www.ezhometech.com/html/ezserver\\_user\\_guide\\_player.html](http://www.ezhometech.com/html/ezserver_user_guide_player.html)

## 2 Ezserver Enterprise

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Ezserver Enterprise includes OTT / IPTV panel, and Streaming server for Multicast channel video streaming, it also provides API. for 3<sup>rd</sup> party software integration.

API has 2 types that are for cloud or app software developers.

1. **EZ Server API** provides API for Cloud applications
2. **EZ Client API** provides API for App in mobile, STB and PC.

OTT / IPTV panel:

- **User management:** create, modify and delete users.
- **Channel management:** create, modify and delete channels.
- **Movies management:** create, modify and delete movies.
- **Series management:** create, modify and delete series.
- **Reseller panel:** create, modify and delete his users.

Streaming server:

- **Video format:** H264 and H265.
- **Audio format:** AAC, MP3.

Hardware Requirement:

- **Min. Requirement:** Dual-Core, 8GB RAM, 1GB Network card.
- **More at** [http://www.ezhometech.com/html/ezserver\\_user\\_guide.html#Hardware%20requirement](http://www.ezhometech.com/html/ezserver_user_guide.html#Hardware%20requirement)

Software Requirement:

- **Linux:** Ubuntu 20.04(Recommended), Debian, Centos
- **Windows:** 64-bits

### 3 Mcast Java codes integration

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Login.java:

Variable:

- **g\_bEncryptedMulticast** : AES Type
  - ✧ **Security Level: 0** (No)
  - ✧ **Security Level: 1** (low)
  - ✧ **Security Level: 2** (high)
  - ✧ Defined at **hls\_multicast\_aes** of ezserver\_config.txt

Function

- **AsyncTask\_Start\_Multicast** : get udp streams and decrypt them
  - ✧ For Security Level: 1 and 2 use
- **InitializePlayer**: get udp streams from **AsyncTask\_Start\_Multicast**
  - ✧ **Security Level 0**: exoplayer plays udp streams by mulitcast IP and port
  - ✧ **Security Level 1 & 2**: exoplayer plays udp streams by IP: 0.0.0.0 and port: 1234
- **Get\_MULTICAT\_IP\_Port**: get multicast ip and port, AES Type from Ezserver

## 4 Mcast C codes integration

NDK

C files:

- **g\_ iptv\_parse\_media\_config.cxx**: Decryption core
- **native-lib.cpp**: Decryption API for java code
  - ✧ **g\_szkey**: Decryption Key is from ezserver\_enterprise/AES.key
  - ✧ **AES.key and g\_szkey mut be same**
- **Add the above two C files into your app ndk**