## Structure and function about IVMS Server

## System structure

MySQL

Audio/ video , /snapshot /download /config file etc data stream

GPS Data stream

Client

MDVR

User Server

Media Server

Wifi download

Storage Server

Login Server

Redis Server

Data Base Server

Gateway Server

Audio/ video /snapshot /recording plan

## Function of each service:

## **User Server:** Client-oriented service. Responsible for user login, device data forwarding, data forwarding to other module functions, etc.

## **Login Server:** save the online relationship, the status of each module, in the Cluster Server. It has the function of and distributing and allocating services

## **Media Server:** Real-time preview, audio and video streams of video responses, configuration files, firmware update files and other big data channels, and also receive files that the device actively uploads in real time.

## **Gateway Server:** facing the device, receiving the status of the device, alarming, and sending various control commands to the device.

## **Wifi download Server:** The execution module for downloading device videos, pictures, and other tasks through wifi. Mainly regularly, fixed-point big data on the device.

## **Storage Server:** Real-time module for snapshot and video plan.

## **DB Server:** The server that mainly saves the GPS status. Saves the historical trajectory. The original trajectory is saved in the database, and later saved as an independent file.

## **Redis Server:** Currently, only few functions are used to save the status of each module's watchdog, and it will be used to save more data in the future, reducing the coupling of each module and improving efficiency

## Data Type

1 . Signaling channel (various protocols, control signals of equipment, gps status, alarm, oil cut, power cut, etc.)

2 . Media data (video, configuration file, query result, track)

## Progress Description

Device data flow

equipment control

Device Configuration

Preview Rear stream

Video recording plan

Download plan