



HikCentral Master V1.0.0

Datasheet

Introduction

Hikcentral Master, as an edge-domain-oriented intelligent business application platform, focuses on the ability to perceive data aggregation, storage, processing, intelligent applications, data fusion



Key Components

1 Server Modules

Module ID	Module Name
HikCentral-Master-VAS	Video system management
HikCentral-Master-METIS	Application of Electronic Map
HikCentral-Master-VPS	Video parsing applications
HikCentral-Master-FAS	Face Application
HikCentral-Master-BMS	Vehicle application
HikCentral-Master-IBODY	Human application
HikCentral-Master-IFOOT	Application of Human Flow
HikCentral-Master-LANE	Vehicle Lane
HikCentral-Master-VIDEO	Video Channel
HikCentral-Master-SAS	Application of Behavior Analysis

2 Clients

- Web Client
- Control Client
- APP(ios/android)

System Requirements

Feature	Description
OS for Server	linux Centos7.4(for hik)
OS for Control Client	windows 7、 windows 10 (32 bit or 64 bit)
Browser Version	Chrome 68
OS for Mobile APP	iOS 10 and later/android phone OS 5.0 or later

Software Specification (All the data below is tested by 4*DS-VE2208X-QBE (64G ram) servers and 3 big data

analysis cluster)

The following table shows the maximum performance of the HikCentral Master

● Basic data

Web maximum concurrent logins 240
Mobile maximum concurrent logins 240
Client maximum concurrent logins 240
Maximum number of simultaneous online users of the system 8000
Single user login response time $\leq 2s$

● Video center

Video inspects the maximum number of user concurrent loads in an organization tree 240
The average response time is ≤ 1 second
Average response time of web side organization tree loading ≤ 1 second
Average response time of map zooming load ≤ 3 seconds
Average response time of monitoring points in tree retrieval of map page ≤ 1 second
The average response time of the monitoring points is ≤ 1 second
Average response time of electronic map loading ≤ 3 seconds
1 million GPS historical data query response time ≤ 5 seconds
Under the condition of 50,000 monitoring points, the loading time of mobile terminal map is ≤ 2 seconds

● Query center

➤ Data transmission

The maximum number of concurrent URL queries within 1S : 25
With 30 million data, the maximum concurrent processing capacity of face pictures (300-400k) is 200 per second
With 30 million data, the maximum concurrent processing capacity of ungraph transmission is 3,000 per second
With 30 million data, the maximum concurrent processing capacity of wifi data transmission (within 8k) is 15,000 per second

➤ Face query

For 3000W hot data, pre-classification was set to 20,8 users searching face (the same person, 5 pictures) at the same time. The average retrieval time is ≤ 5 seconds
For 3000W hot data, pre-classification was set to 20,8 users' face search at the same time (not the same person, 5 pictures), the average retrieval time ≤ 2 seconds
3000W hot data is pre-classified to 50. The average retrieval time of 18 users for face search (the same person, 5 pictures) is ≤ 5 seconds
3000W hot data is pre-classified to 50. The average retrieval time of 18 users for face search (not the same person, 5 pictures) is less than 1 second

3000w hot data, pre-classification is not turned on, and 8 users can search face with face (not the same person, 5 pictures) at the same time, the average retrieval time is less than 1 second
The maximum amount of data derived from the results of face search is 2000;

➤ Vehicle query

40 users can concurrently query the vehicle properties of any vehicle for 30 days, and the response time of the query results is ≤ 1 second
The export time of 2000 uncharted passing data ≤ 2 seconds;

➤ Human body query

Under the quantity of 2000 query result data, the time of all human query result export is ≤ 2 seconds

50 users concurrently query the body heat data of 50 million people, and the response time of query results is ≤ 2 seconds

10 users conduct person-to-person search on 25 million mannequins (thermal data), and the return time of query results is no more than 2 seconds

● **Alarm control**

➤ Alarm query

At the level of 2 million data volume, the maximum return time of alarm record query results is 2 seconds

➤ Vehicle alarm control

The vehicle data is sent at the snapping frequency of 200 pieces/second. When the sent license plate is consistent with the deployed license plate, the alarm is triggered, and the delay time of alarm information storage ≤ 5 seconds

The vehicle data is sent at the snapping frequency of 200 pieces/second. When the sent license plate is consistent with the deployed license plate, the alarm is triggered, and the client receives the alarm whose delay time ≤ 7 seconds

➤ Face alarm control

The success rate of face blacklist assignment is 100%

The response time of distributed control task to each TDA and effective (the effective time can be viewed on the TDA page) ≤ 1 second

Under the premise of 20 alarm frequencies per second, the maximum running time of the real-time warning module of the client is 8 hours

➤ Vehicle application

In the case of 5 concurrent users' query of vehicle track, the vehicle track analysis was conducted for any 30 days, and the return time was no more than 2 seconds

In the case of concurrent regional collision of 5 users, multiple bayonets in more than 2 arbitrary spatial regions were analyzed for vehicle regional collision for any one day, and the average response time of the system was less than 1 second

Five users conducted track check for vehicles in any 30 days, and the return time was no more than 1 second

● **System management**

Interface response time of jump department management ≤ 2 seconds

Jump user management interface response time ≤ 2 seconds

Jump role management interface response time ≤ 2 seconds

User management interface user query time ≤ 1 second

Role management interface role query time ≤ 1 second

User management interface user export response time ≤ 5 seconds

Department management interface department tree expansion response time ≤ 0.5 seconds

User management interface assigned role response time ≤ 2 seconds

Page turning response time of user management interface ≤ 1 second

Role management interface page turning response time ≤ 1 second

List database check re query results single maximum amount of exported data 2000

The maximum department management capacity is 10,000

Maximum role management capacity 30,000

The maximum user management capacity is 100,000

The maximum monitoring point management capacity is 500,000

The maximum equipment management capacity is 100,000

