Functions and Requests

Screen size 1.6mx1.6m, recommend to use P5 outdoor waterproof cabinet. The web platform can realize all synchronizing led programs for all led screens; can display governmental information, public service advertising, fire control propaganda videos, images, weather forecast, real-time message and so on. By introducing wisdom city concept based on cluster management, led screens will become more and more intelligent, not only display advertisements, emergency notices, real-time weather information, security notification, but also can be installed Web cameras to broadcasting security information immediately, real time traffic situation and emergency things. For example, if someone robbed vehicles, then led screen will display license plate number, suspect information immediately.

LED screens will become an interface for human and machine based on the Internet plus cloud server. For example, transport hub information led screens display current flights/buses information, unsold tickets information, unsold cinema tickets, empty hotel rooms and promotions for supermarket.
Display views

Screen size
System network topology

Equipment component:

One piece xixun Y10 controller (with 3G/4G), multiple number D10(D10 quantity is according to customer requirement and LED screen resolution), GPS antenna. Below is connecting picture.
Function and theory

Realization theory: Every Y10 will has SIM card and will access to internet through 3G/4G data flow and then get communicate with web platform, every led screen will get led program data from the server and display. When citizens pass by these led screens, will see these programs and get these news. All led programs will be updated and displayed synchronizing.
Y10 has following advantages:

1) Supporting non-linear editing;
2) Video hardware decoding;
3) Supporting PCI-E 3G modem;
4) WIFI modem on board;
5) Supporting maximum 1280x512 pixels;
6) Supporting HDMI audio and video outputs;
7) Supporting secondary development based on Android system, for example, customer could embedded own APP to realize some special requests, no need to use AIPS platform;
8) Fast communicate rate, totally solve the 3G communication bottle-neck, Packet Switched Domain (PS for short) bearer service under WCDMA mode: maximum rate is 384 Kbit/s, ; HSDPA Max 14.4Mbps(DL)/Max 5.76Mbps(UL); UMTS Max 384Kbps, WCDMA/HSDPA/HSUPA/HSPA: 850 MHz/900 MHz/1900MHz/2100 MHz , GSM/GPRS/EDGE: 850 MHz/900 MHz/1800 MHz/1900 MHz, GPS L1: 1575.42 MHz;
9) Supporting continue transfer from breakpoint, adopting database warehouse management for onboard program so that could reduce dataflow extremely and optimize storage space;
10)Supporting to connect receiving cards, refresh rate will self adapt to screen resolution, adjust brightness to realize better display effect;
11) Possessing strong software----web-base multi-media publishing system (AIPS), so that could manage all terminals, edit and publish program;

It is a B/S architecture software, supports tablet, cell phone and desktop computer automatically with perfect UI (user interface) and excellent experience, realize cross various platforms; traits as following:

1) supports group management, check online/offline status in real time;
2) Cloud network security design;
3) supports to publish real time notification;
4) **supports screen shot for showing on the sign, please see picture below:**
5) supports to read back programs;
6) supports to turn on/off led sign and adjust brightness remotely;
7) supports to upgrade firmware and set parameters remotely;
8) **supports schedule operation including publish programs or operate led sign in schedule time;**
9) **supports to adjust time through sever;**
10) excellent inter operate on web, no need to refresh to get the real time operate response and status
11) great concurrency by adopting the best background program and cloud database storage solution
12) adopting non linear editing way and getting rid of the constraint of traditional LED program editing, no window and program material limitation, to
meet users operation habits especially for editing and publishing advertisements;

13) advertising contents statistics on time; charging and creating report forms automatically;

14) supports user management, rights management and classification system for examining and publishing programs;

15) supports log management including user log, terminal log and bug log;

16) Make all led panels synchronizing by network timing. Can set exactly schedule and set time for each material, to realize synchronizing multiple led panels’ pictures through internet.

Web platform, easy to use

Software platform uses B/S structure, friendly use, no need to set router, to buy domain name, to set up sever, only need user name and password to log in, then can group control all terminals. As below picture.
No limits to control terminal and operation system:

No need to install software, can open web group control display terminal at any terminal which can access to public network (includes PC, phone, pad)

1. Easy to make program, non-linear editing, professional in advertising industrial:

AIPS platform support web online editing program, weather forecast, as below picture:
2. Multilevel purview management, meet different types management needs:

Edit, publish, audit, and approve four rights.
3. Support schedule play and update:

Send program by time schedule, manage ads playing time more flexible.
4. Can control all kinds of function, like brightness control etc. Can turn off and turn on LED screen, adjust brightness and volume etc, as below picture:

5. Supports keeping send program even paused, save internet flow.

6. Read back content, easy to monitor:
7. Insert in time message


Y10 controller has several way to access internet which has on board 3G/4G, wifi together with LAN port, no need other 3G/4G router and device. Y10 picture:
9. Support GPS task:

With GPS antenna, you can check led screen location; can play assigned ads on assigned led screen, easy to manage. Also can check ads playing log.
10. Use elasticity cloud sever: can update server configuration anytime when original configuration can’t realize.

Cloud platform advantage:

**Stability**

- The reliability of data and service is 99.999%.
- Automatic migration when server goes down; data backup and rollback.
- System performance alerts.

**Security**

- DDoS defense system, Security-group rule protection.
- Multi-user isolation.
- Password cracking defense.
Elasticity

10 min + 5 min + on line

Boot or release 100 cloud servers within 10 minutes.
Upgrade CPU and memory within 5 minutes during downtime.
Constantly upgrade the bandwidth online.

High Quality Network

Multi-line access to the backbone network.
Exclusive multi-line BGP.
Optimal routing algorithm based on BGP.

11. Server configuration for reference

Hardware: CUP 2 cores, Ram 4GB

Operation system: Windows Server 2008 R2 Stander 64 bit English

Storage: 100GB

Network bandwidth: 10Mbps

Cases

Longgang Shuiguan Highway Entrance in Shenzhen

P5 SMD screen size 320x320pixels
Highway Entrance in Henan
A highway Entrance at Yunnan