

A high-angle, top-down photograph of a person's hands working on a silver laptop. The laptop screen displays a code editor with Java code. To the left of the laptop, a black and white disposable coffee cup with a white lid sits on the table. In the bottom left, a hand holds a smartphone displaying a video call. A pair of black-rimmed glasses lies on the table to the right of the laptop. The entire scene is set on a light-colored wooden table. A semi-transparent dark grey banner is overlaid across the middle of the image, containing the text 'Digital Signage Solution' and 'Q-SIGN'.

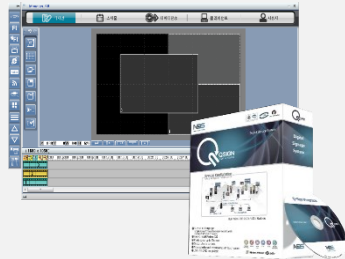
Digital Signage Solution

**Q-SIGN**



## Hardware

Outdoor / Indoor  
Video Wall & Display  
Mirror Display  
Smart Kiosk



## Software

Total Signage Solution  
Content Authoring Tool  
Window/Android  
Cloud



NDS Solution Co., Ltd.



## Content

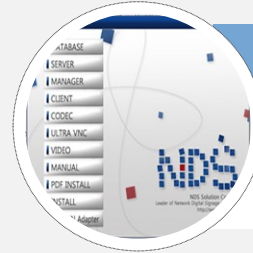
3D Wayfinder  
Manu Board  
Motion Detecting  
Face Recognition



## System

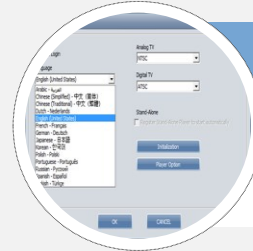
Planning & Introduction  
Installation & Support  
System Stabilizing  
Maintenance

## Q-Sign 3.0



## User friendly

- ✓ Convenient and intuitive UI
- ✓ Easy to learn and use
- ✓ Easy and Fast Installation



## Stability

- ✓ Sold in over 20 countries for 8 years (Support 14 languages)
- ✓ Stable on various network and conditions
- ✓ Regular debugging and user update



## Compatibility

- ✓ Multi Hardware controlled by one Q-Sign (Kiosk, Video Wall, LED Sign, Menu board etc.)
- ✓ Support Window & Android OS



## Reliability

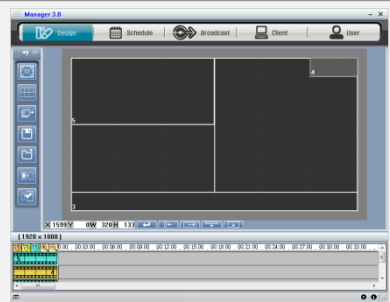
- ✓ Domestic and Overseas Reference
- ✓ Overseas : Kunming/Hangzhou/Hanoi/Hochiminh International airport, Court in Dubai, Shopping Mall in Canada etc.
- ✓ Domestic : Seoul and Yong-in City hall, Mapo and Gangseo Provincial Government Office, Kintex, National Museum etc.

# 01 Features

## Intuitive interface with five menu



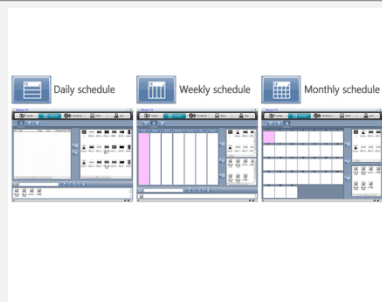
### Design



- Add screen layer
- Divide screen
- Add contents
- Contents effect
- Time management
- Overview



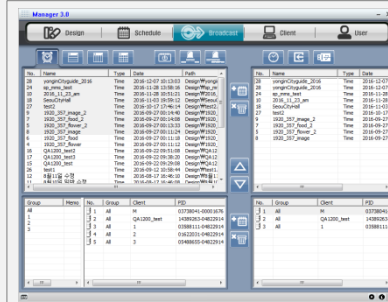
### Schedule



- Daily schedule
- Weekly schedule
- Monthly schedule
- Time management



### Data transfer



- Send contents & schedule
- Broadcast immediately
- USB transmission
- Reserve transmission
- Emergency schedule
- Control order



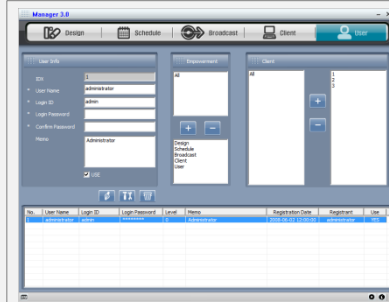
### Client



- Add group
- Add client
- Check client status
- Client control



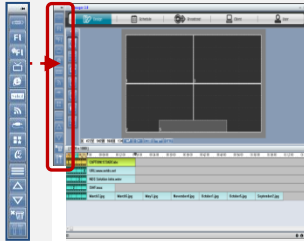
### User



- Add user
- Authorization
- Add client



### Contents



- Support various contents  
Image/Video/Flash/Web/RSS/Ticker/TV/HT  
ML/Flash EXE/Flash SWF/Application etc.

### Widget



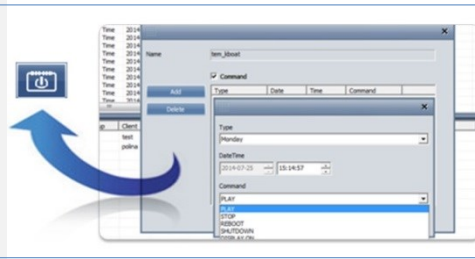
- Support own Widget  
Available to select color and skins of simple  
designed time/date widget

### Layer



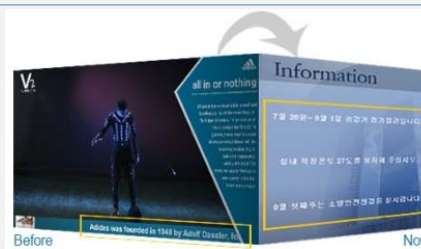
- Various screen composition  
Effective screen composition from divide  
screen to full screen by layer

### Contents control



- Client control  
Set a time of order such as On &  
Off/Reboot/Play/Stop for contents

### Multi Line



- Subtitles  
Multiple subtitles are available

### PIPVIV

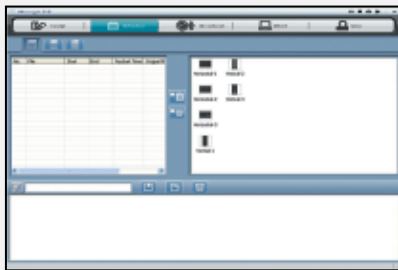
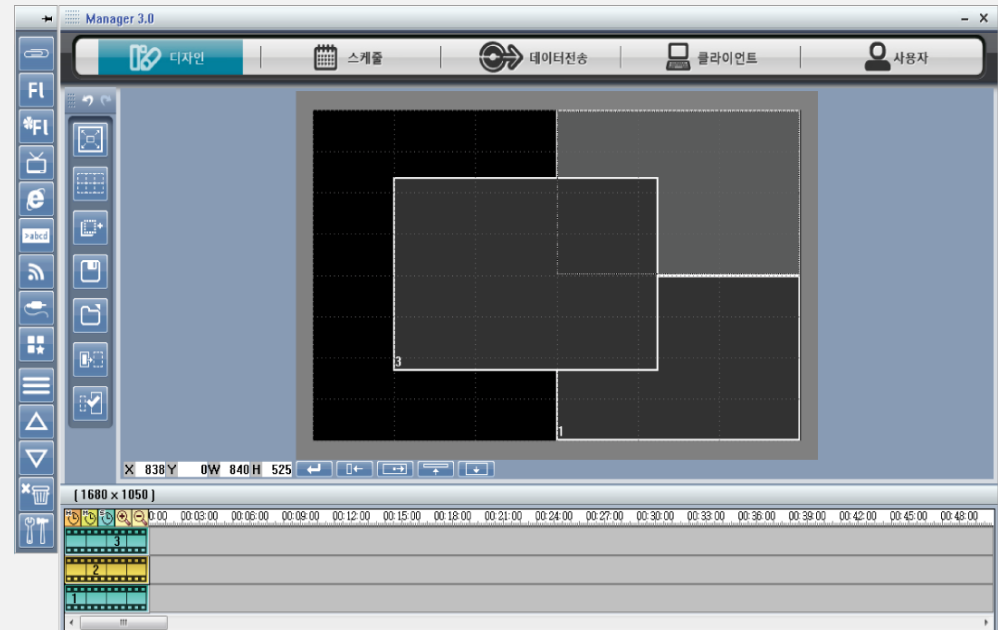


- PIPVIV  
Easily add image and video just to drag it.

## Digital Signage control solution through network

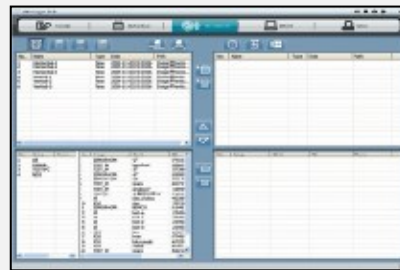
## [CS ver.] Q-Sign 3.0 Software

- Support 15 languages
- Easy installation using Window OS  
(Installation within 15min)
- Content design and schedule planning
- Support various applications
- Safe authentication using USB Dongle



## Schedule

- Daily, Weekly, Monthly schedule
- Selectable schedule management



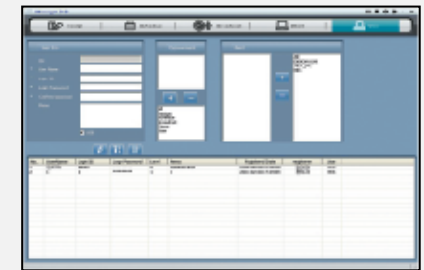
## Data transfer

- Data transfer and USB transmit
- Immediate / Emergency reservation



## Client

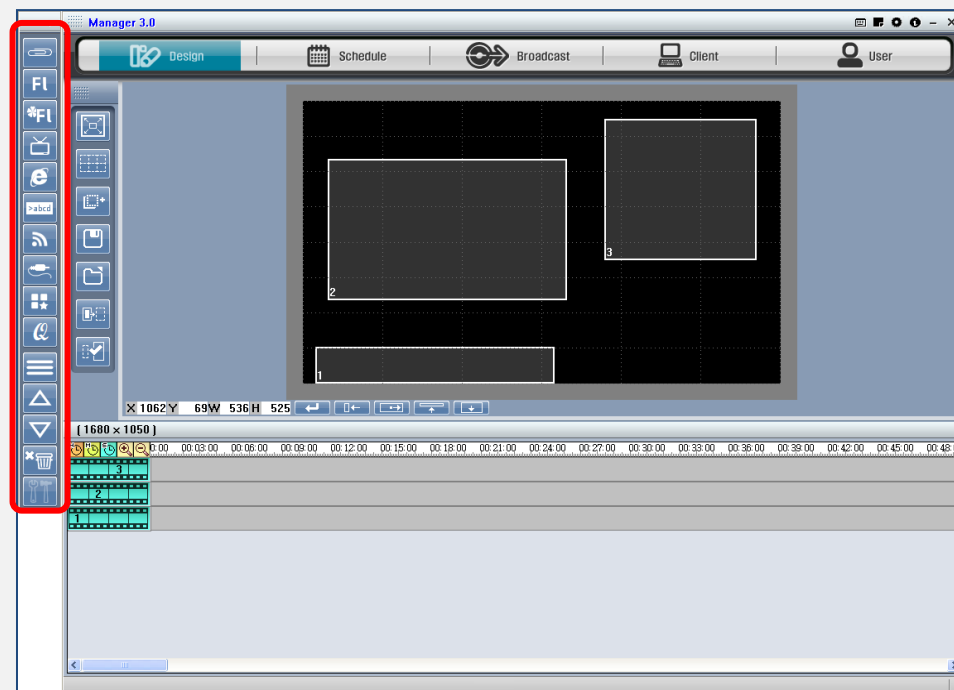
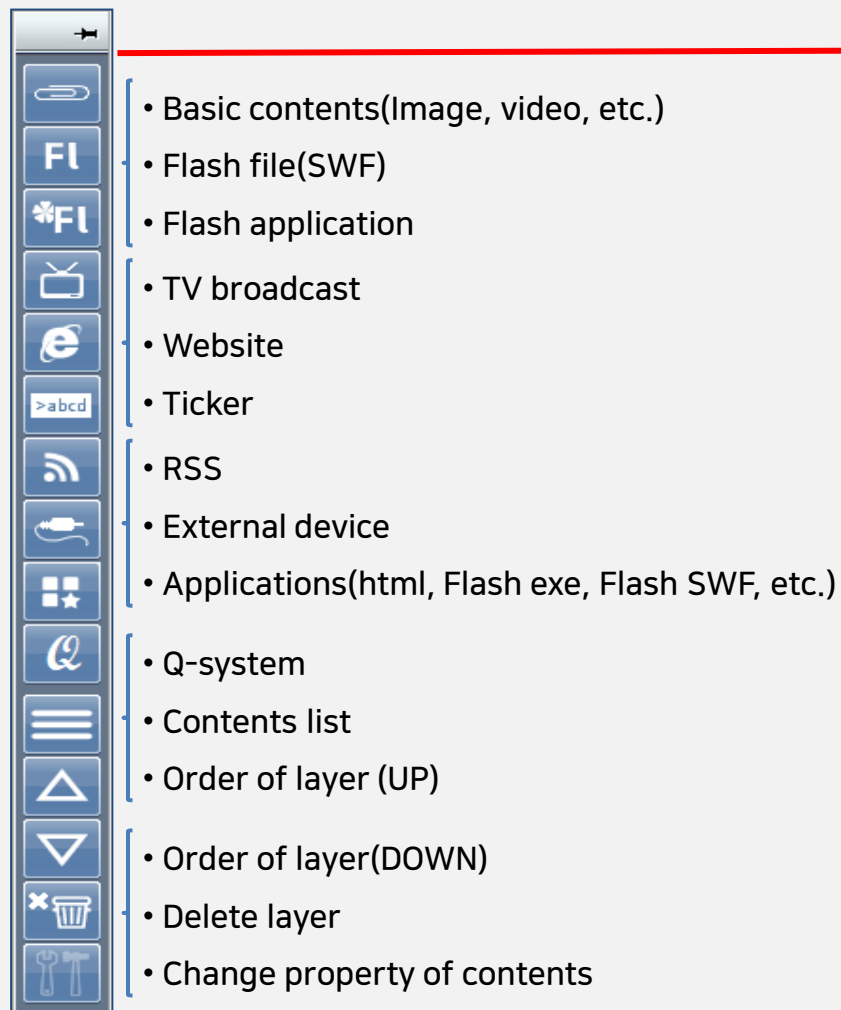
- Remote power and monitor on/off
- Monitoring clients status



## User

- Multi User Registration
- Distribution of User authority

## Main Menu

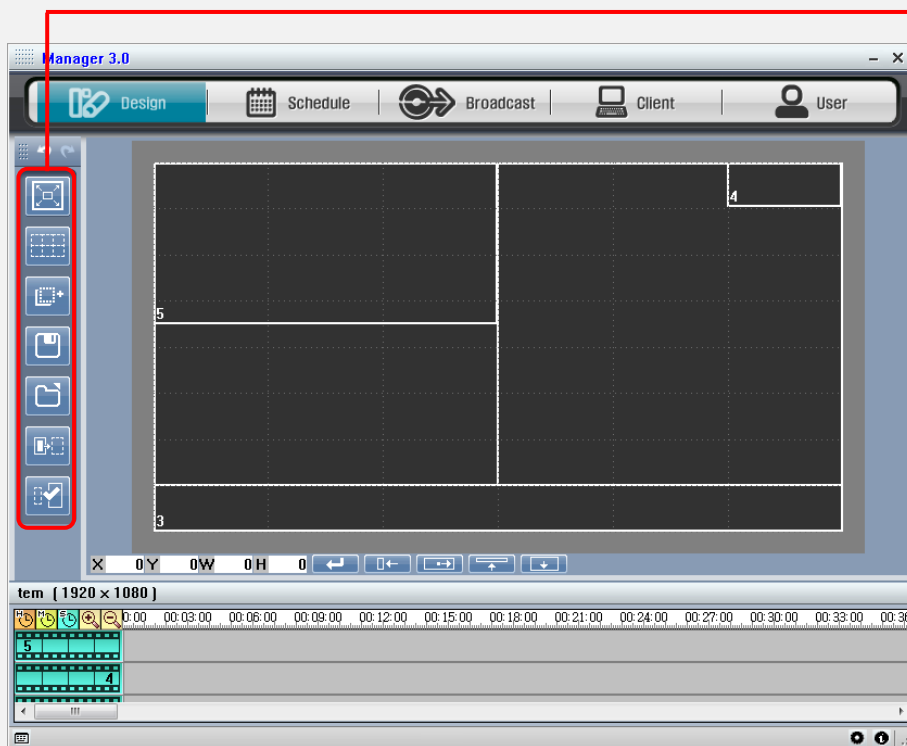


## Function list

- Resolution set depends on display
- Various screen formation by multi layer
- Unconstrained layout makes maximum 32 divide screens
- Support various image file(jpg, bmp, png, gif etc.) and video file(wmv, avi, mp4, mov, asf etc.)
- Support music file(mp3, wma) and flesh(swf)
- Support TV input(Analog, Digital, S-Video, Composit, Component)
- Support video input(Webcam, TV Tuner, Composit, S-Video, Component)
- Support document file such as Power point(ppt, pptx) and Excel, MS Word, Hangle etc.
- Support Website
- Support various applications based on Windows OS(Application.exe, Flash.exe, Flash.swf, html etc.)
- Various switch effects for images are selectable
- Support subtitle and RSS, user can choose it's location, background and letter color, size, font, transparency.
- Daily, Weekly, Monthly schedule management
- Check designed template list is available even during data transfer.
- Support reservation, immediate and USB schedule transmission
- Emergency and overlap schedule transmission
- Sent schedule, playback time check available through report
- Auto-delete function when client's data get close to hard disk's capacity
- Individual/Group clients control
- Registered clients list and status check
- Remote access to client PC and control through network(play, stop, reboot, on and off)
- Authority distribution for each user
- Adding specific applications such as flight schedule, and patrol for contents safety from hacking
- Lock Key system through USB DONGLE that has Wifi function



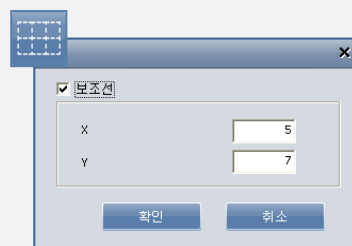
## Design – Template design and screen composition



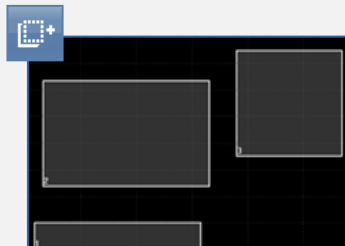
- Set up of display resolution  
(Support maximum resolution hardware can have)
- Screen Guideline  
(Help customizing screen size and formation)
- Add Screen  
(Available set a resolution for each screen)
- Save the template
- Open the template
- Preview in small size screen
- Preview in full size screen



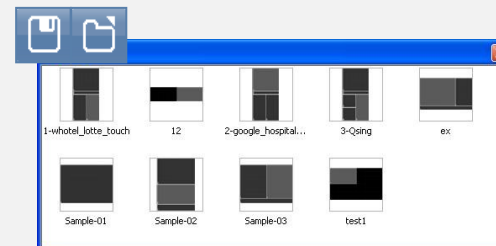
Set a resolution



Set a guideline



Add screen

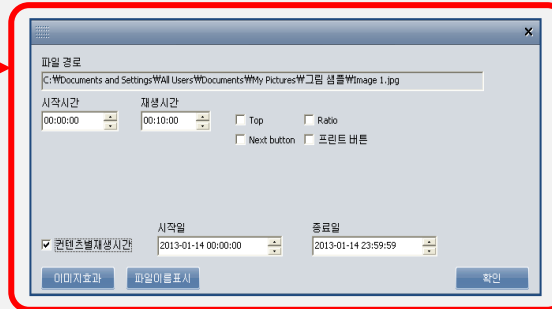
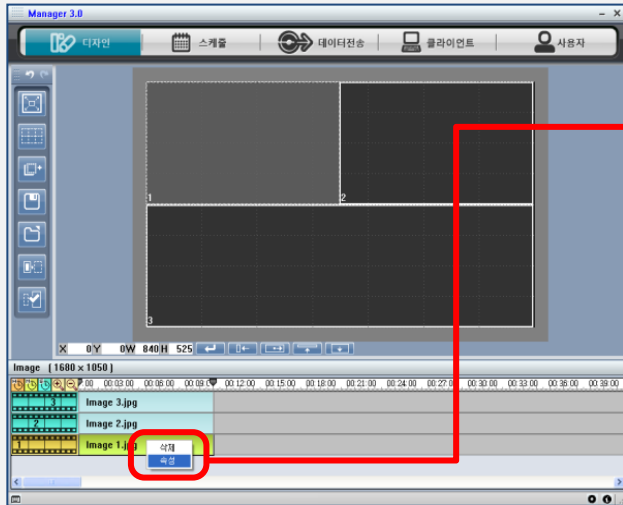


Open saved template

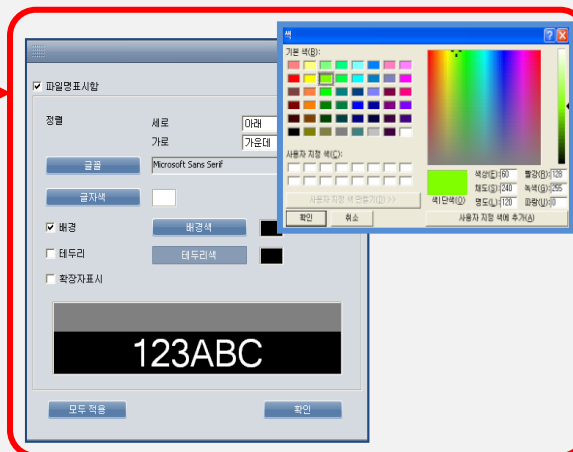
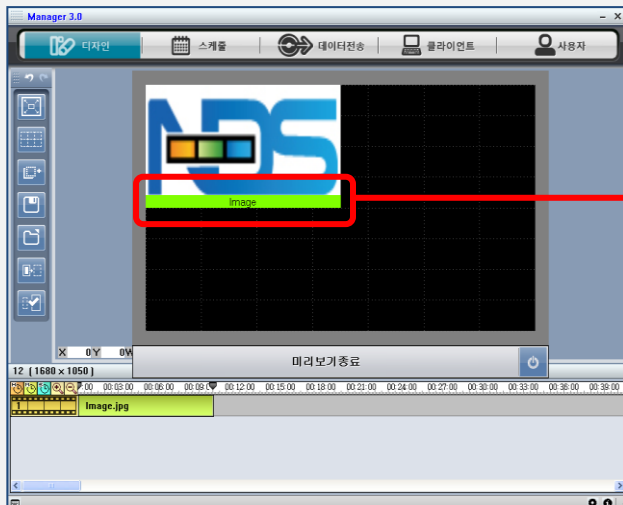


Preview

## Design – Playback time setting

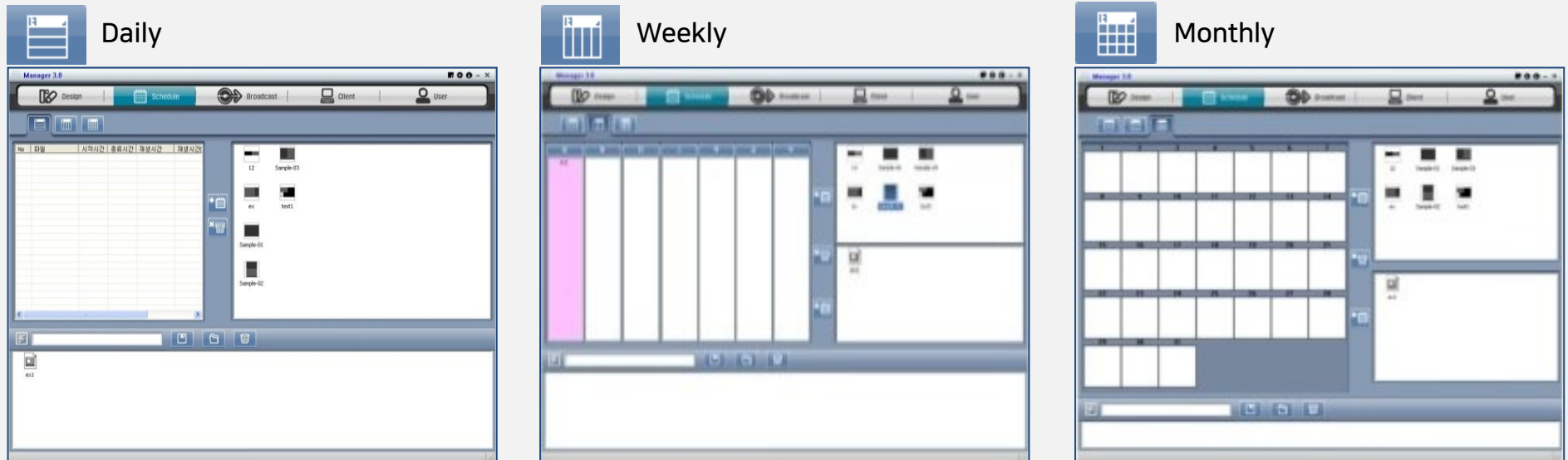


- ✓ Check playback time for each contents
- ✓ Start date(year, month, day, time)
- ✓ End date(year, month, day, time)



- ✓ Playback image
- ✓ File name below image
- ✓ Color of word and background customizing

Schedule – Schedule setting for each content



✓ Set up and control your contents by daily, weekly, monthly in scheduler.

## Data transfer – Send content through network or USB

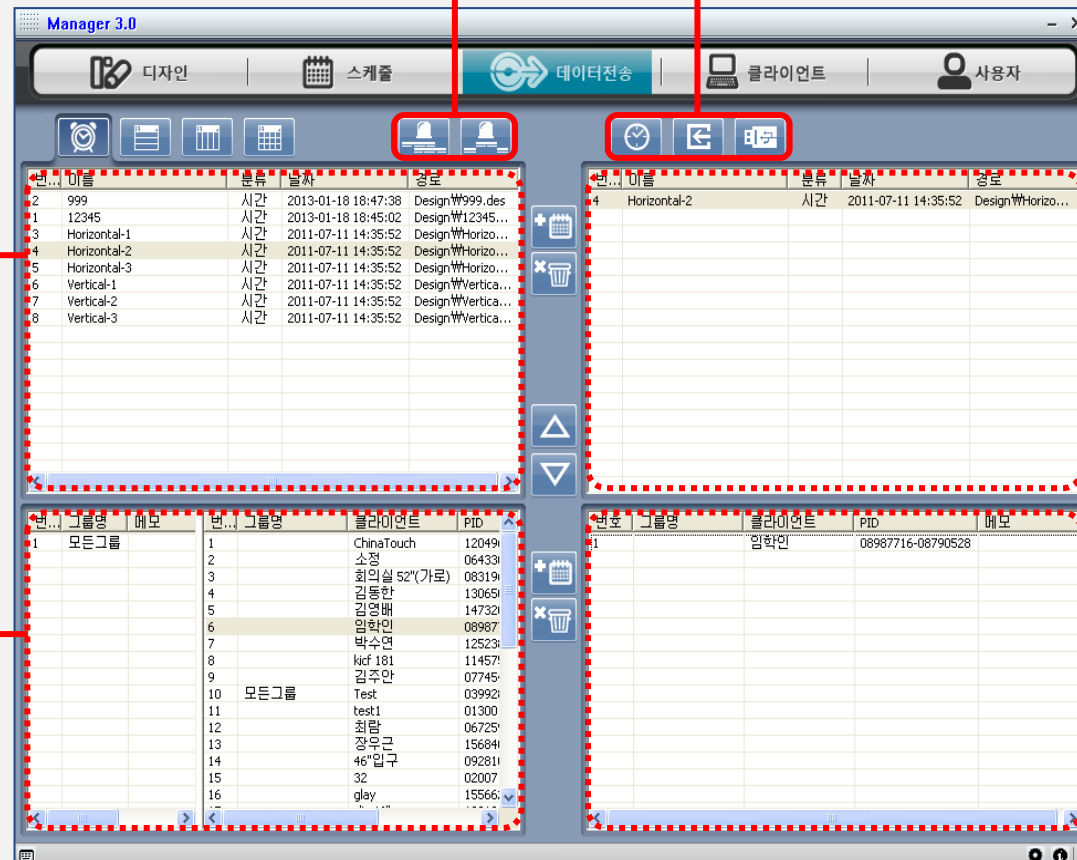
Emergency contents transfer :

Multi/Single broadcast of emergency contents

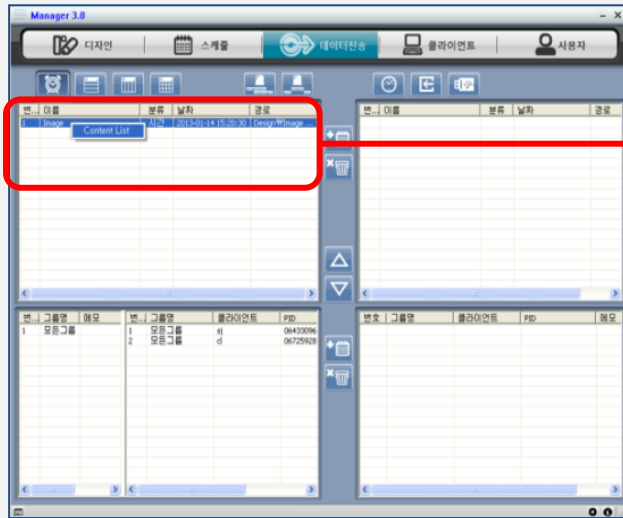
Data transfer type :

Reserved/Immediate/USB  
transmissionAvailable contents and  
schedule listContents and schedule  
for transmission

Transfer available client list

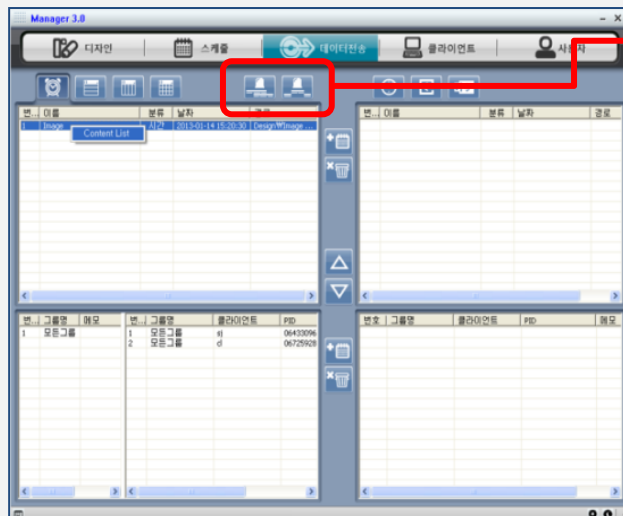
Picked clients for  
being transferred

## Data transfer – Contents list, Emergency data transmission



번호	Screen	Content	Type
1	1	Image 1.jpg	Image
2	2	Image 2.jpg	Image
3	3	Image 3.jpg	Image

- ✓ Click the content
- ✓ Click right button of mouse
- ✓ Look up Contents List



**Emergency Option**

☐ Once  
☒ Repeat

Start Date: 2013-01-18 00:00:00 ~ End Date: 2013-01-18 23:59:59

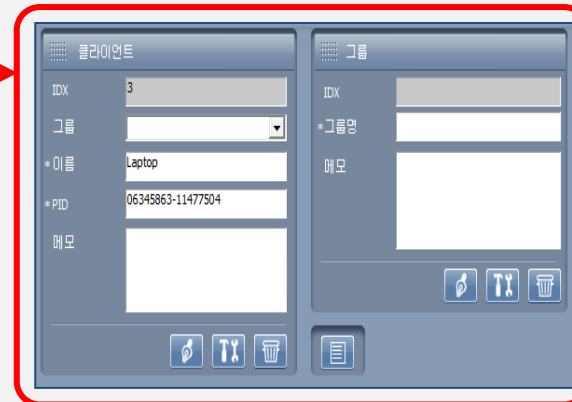
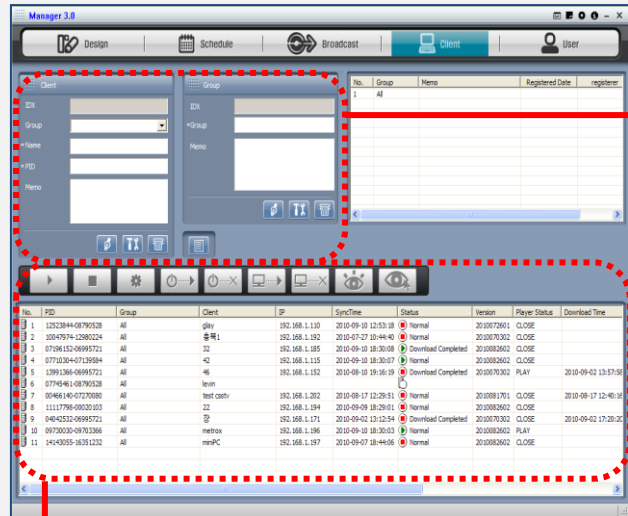
Repeat Time: 10 Minute

OK CANCEL

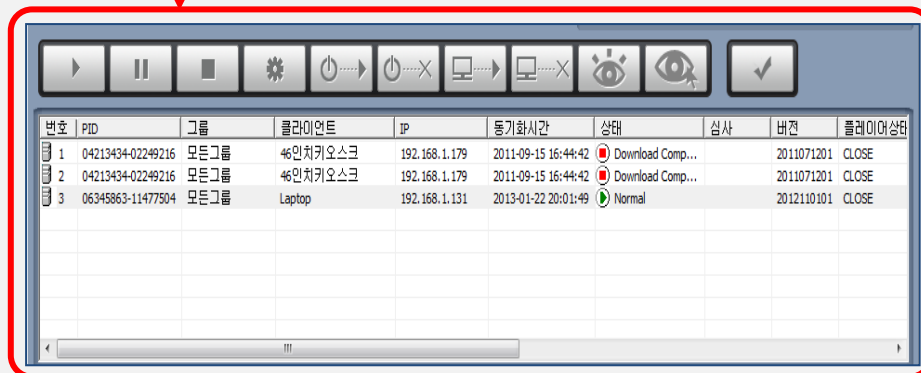
- ✓ Set up of emergency content's extension available
- ✓ Once/Repeat in the period
- ✓ Overlap play over present contents
- ✓ Play after end of present contents



## Clien – Content and display management



- ✓ Register/Re-set/Delete client
- ✓ Set a group for each client



- ✓ Monitoring of client's operation status is available
- ✓ Support client remote control through network (Play, Stop, Reboot, Shut down)

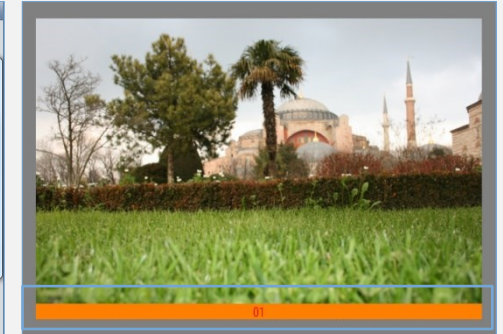
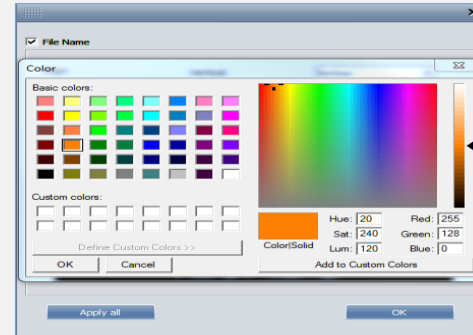
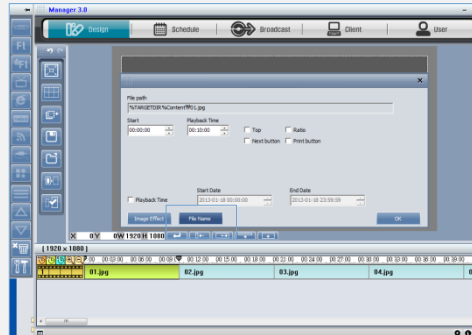


## Others

## #1 Display image title

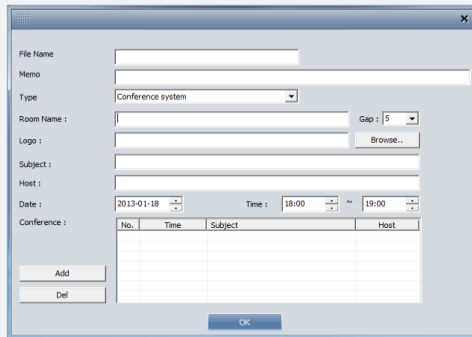
Image tab &gt; show file title

Title can be displayed on the image



## #2 Conference room App

Add application &gt; Conference

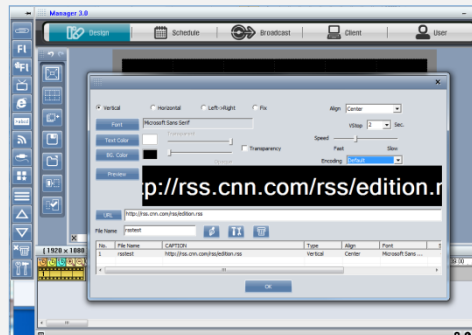
Efficient and Easy way to use  
than meeting room system in  
Outlook

## #3 RSS Encoding

RSS tab &gt; encoding

Choose one of default, ANSI,

UTF8 option

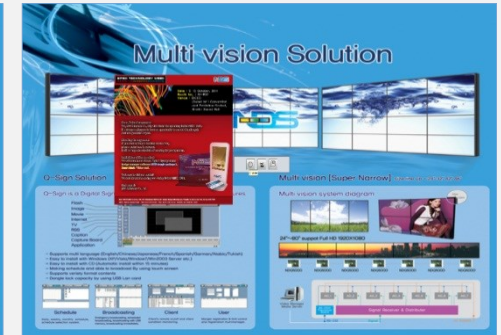
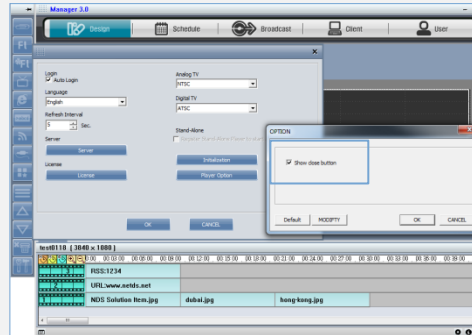


## Others

## #5 Image in image

Player option > Show 'End button'

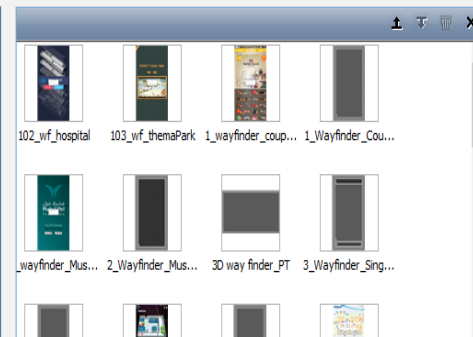
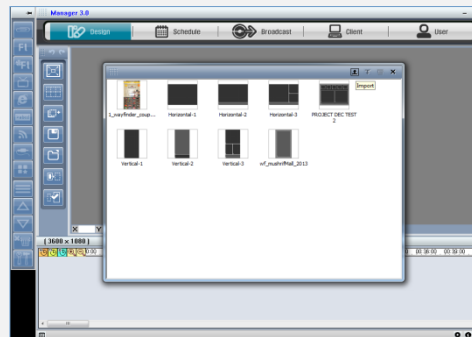
You can add image or video during presentation



## #6 Import/Export contents

Open > Import/Export

Easy managing of saved contents

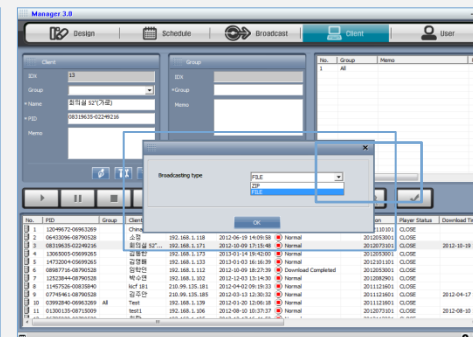
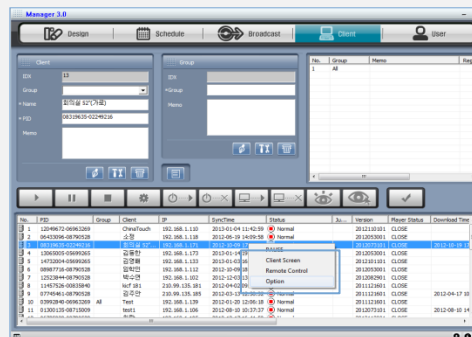


## #7 Transmission type

Client list tab

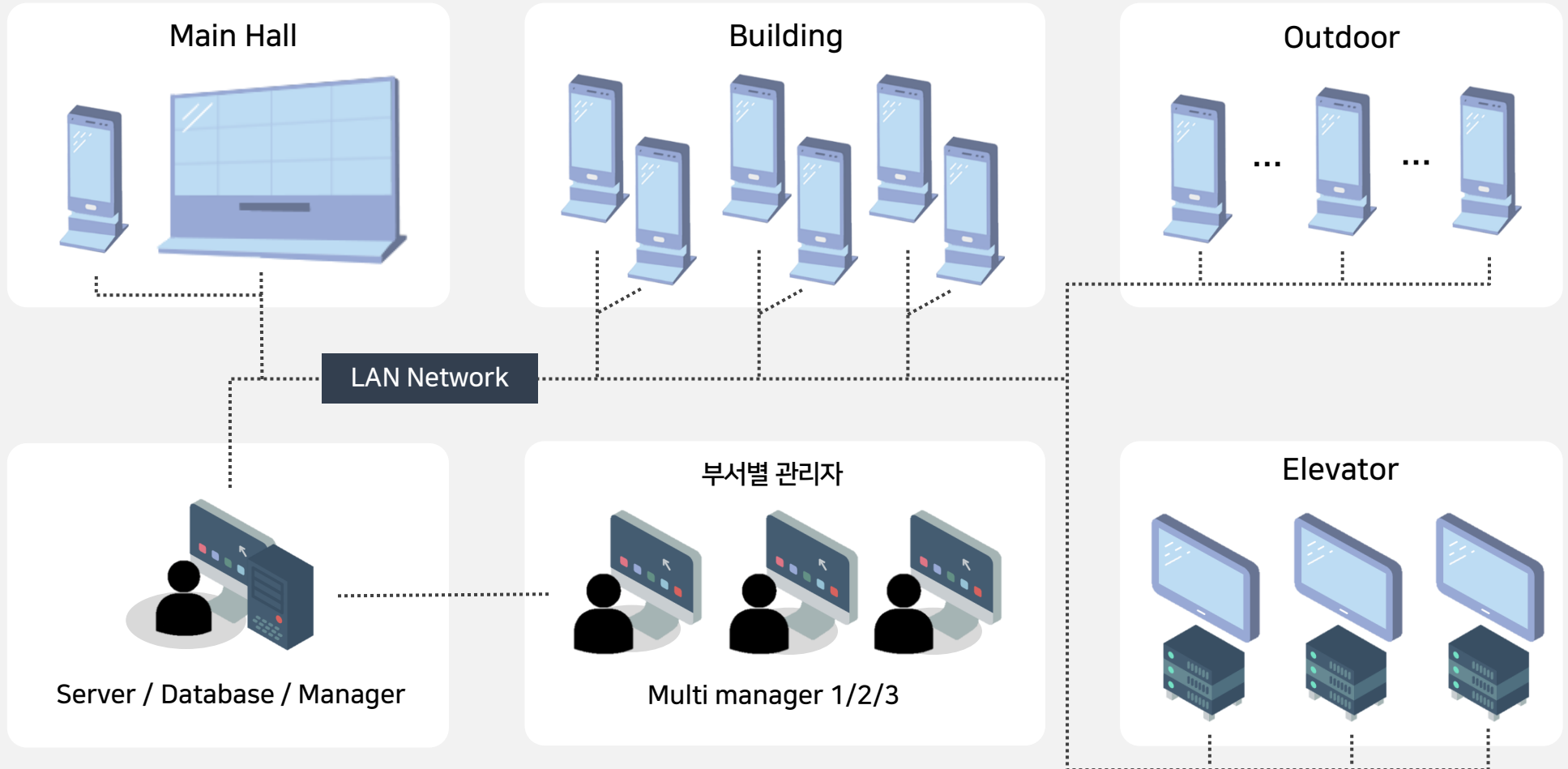
Zip : Better for file capacity

File : Better for file transmission



Block diagram of management system through LAN network

### System Diagram Example

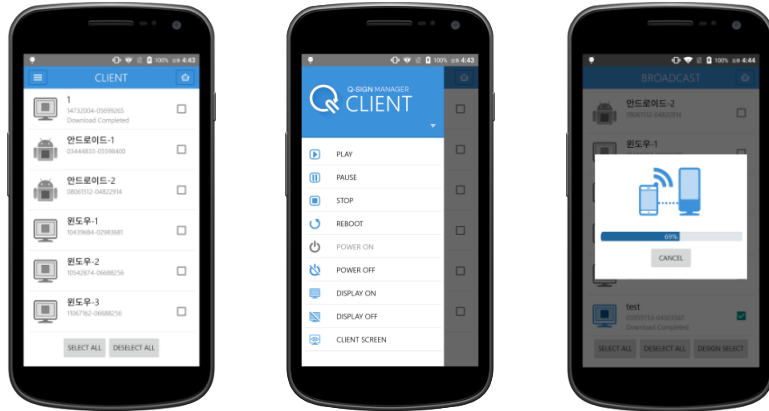




## Q-Mobile Manager 1.0

### Q-Mobile Manager 1.0

- Developed in Android OS optimization environment
- Better accessibility with new UI design
- Available on over android 3.0 ver.



### Why mobile?



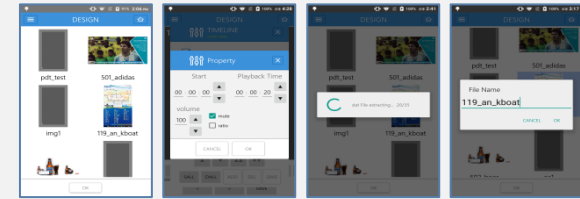
- Onsite control of facility
- Transfer and check the contents onsite
- Flexible response for any problems
- Control it anywhere you want using accessible IP

## All main functions of PC ver. are available



### Design

Import/Export Design, Add/Delete contents, Order of contents, Playback time



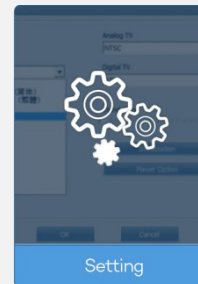
### Data Transfer

All/Individual/Select Transfer, Duplicate transmission



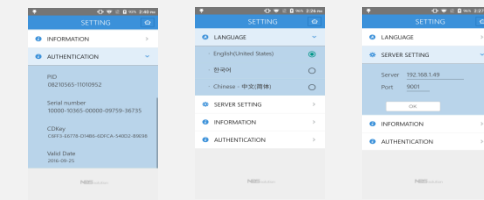
### Client

Status check  
Play / Pause / Stop / Re-start  
Screen On&Off  
Shut down  
Show display



### Language

Support 4 languages (Korean/English/Chinese/Arabic)



## Simple Q-Sign management on a web site

- ✓ Easy content editing through online webpage
- ✓ Background and theme editing, Image/Text/Video uploading
- ✓ Set a time for playing content on and off.
- ✓ Notice page edit and delete.
- ✓ Easy content modifying and uploading even for someone who doesn't know CMS software due to user-friendly interface.

## Content Management

관리페이지

배경 이미지 설정  
콘텐츠 관리  
환경 설정

콘텐츠 관리

로그아웃

No	제목	콘텐츠	날짜	View/무 (예약날짜시간)
7	image9	이미지	2020-06-08	<input type="checkbox"/>
6	image7	이미지	2020-06-08	<input type="checkbox"/>
5	image8	이미지	2020-06-08	<input type="checkbox"/>
4	image7	이미지	2020-06-08	<input type="checkbox"/>
3	image6	이미지	2020-06-08	<input type="checkbox"/>
2	image5	이미지	2020-06-08	<input type="checkbox"/>
1	image4	이미지	2020-06-08	<input type="checkbox"/>

닫기 등록

## Notice board

관리페이지

배경 이미지 설정  
콘텐츠 관리  
환경 설정

전체관리자

전체 공지

파일 업로드

## Set on and off time

관리페이지

배경 이미지 설정  
콘텐츠 관리  
환경 설정

시작 일시 - 종료 일시 설정

1 예약 날짜 시간

시작일시 종료일시

확인 취소

## Theme

관리페이지

배경 이미지 설정  
콘텐츠 관리  
환경 설정

FRAME 설정

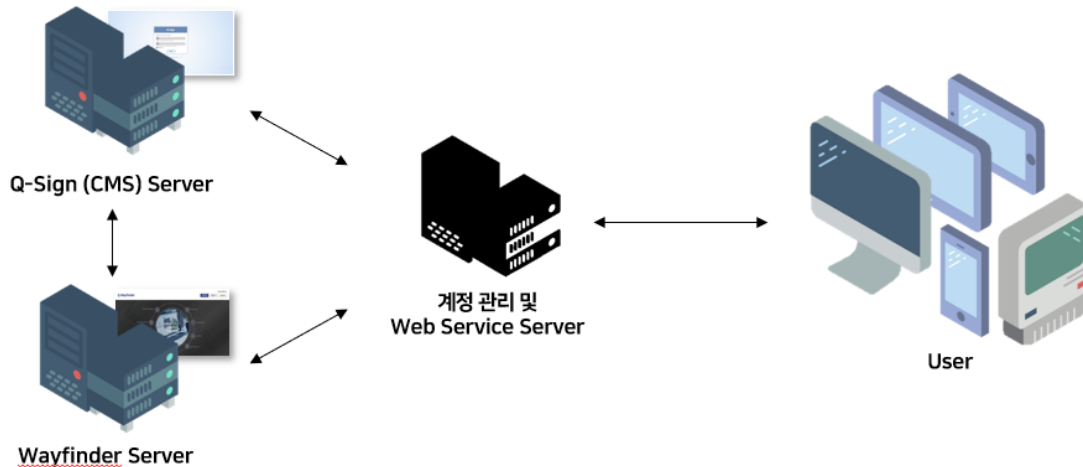
FRAME 배경 이미지 설정

1번 배경 2번 배경 3번 배경 배경 없음

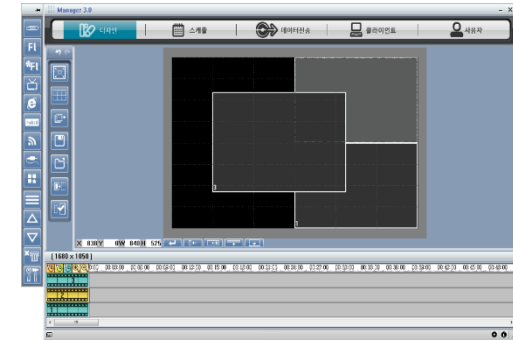
Frame 설정

## Q-Web 1.0(Cloud version of Q-Sign)

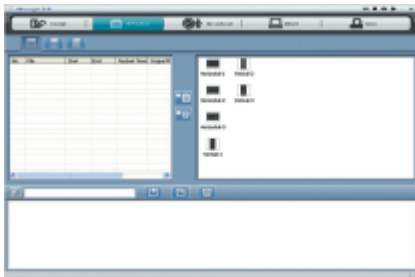
## Cloud Server



## CS Version

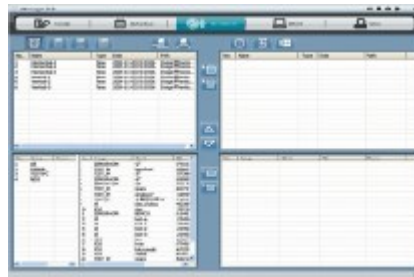


- ▶ Support 15 languages.
- ▶ Easy installation within 15mins.
- ▶ Content design and schedule transmission.
- ▶ Support various application formats.



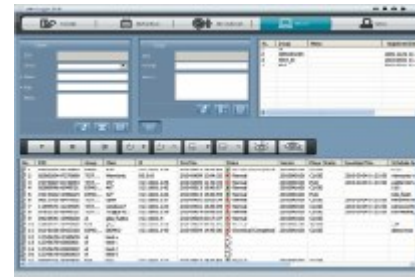
## Schedule

- Daily, Weekly, Monthly schedule
- Selectable schedule management



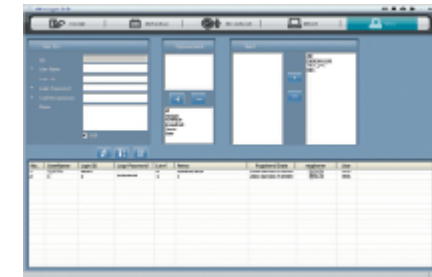
## Data transfer

- Immediate/reservation/Emergency data transfer and USB transmit



## Client

- Remote power and monitor on/off
- Monitoring clients status



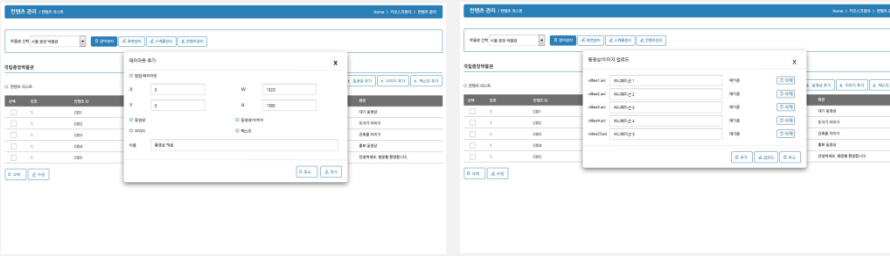
## User

- Multi User Registration
- Distribution of User authority

## Q-Web 1.0(Cloud version of Q-Sign)

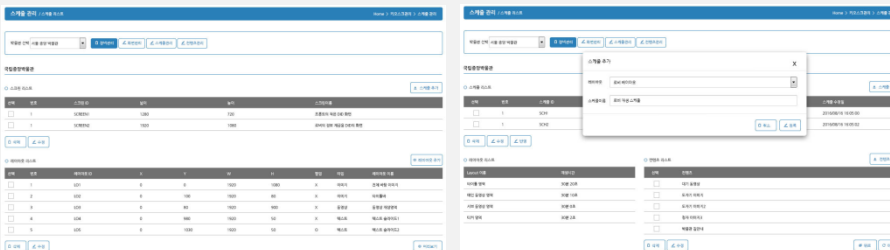
## Web based CMS Q-Web 1.0

- ✓ Web based CMS makes you control it anywhere in the world
- ✓ Include main function of CMS(Making, Managing, transmission, Client control, Emergency notice etc.)
- ✓ Efficient managing by distribution of site/client to each manager
- ✓ Available in various environment by multi browser support



## Developed for effective user environment

- ✓ Simple data flow and network for minimize traffic
- ✓ Only core functions included for minimize system resource usage and hardware overhead
- ✓ Contents will be played stably even data base are downed
- ✓ Automatically restart when client abnormally ends



## All main functions of PC ver. are available

## Manage Display

Register/Delete/Power control/Screen status/Play status/Check error

## Manage Screen

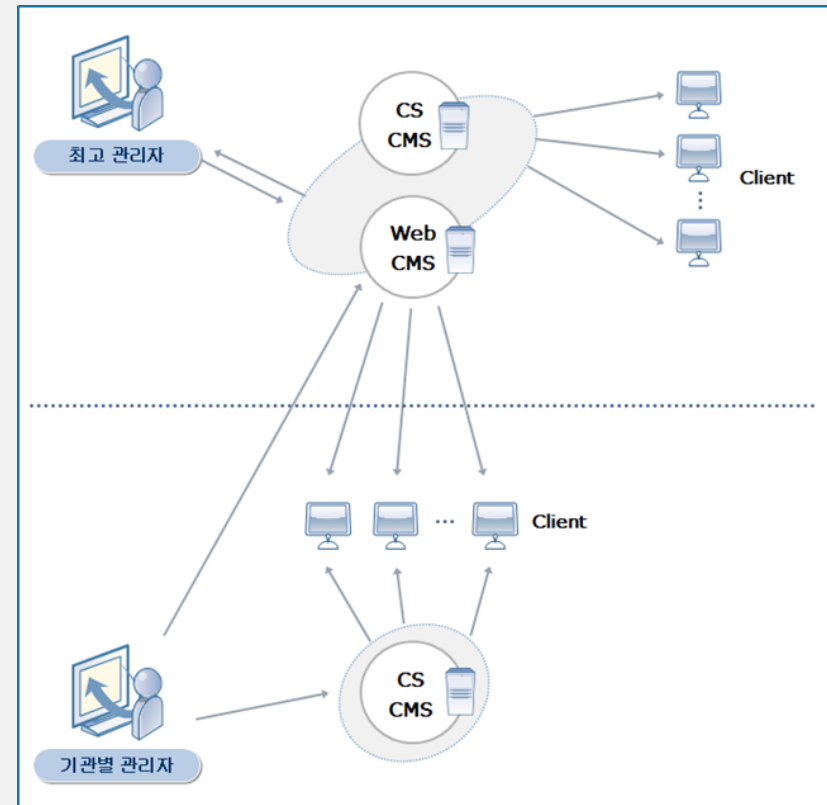
Add/Edit/Delete screen, Add/Edit/Delete/Preview of layout

## Manage Schedule

Add/Edit/Delete schedule, Add/Change order/Delete of contents

## Manage Contents

Add image/video, Edit registration info, Add/Edit subtitle, Emergency notice



## Integrated server &amp; separate management system

## Integrated server / Management software(CS based)



- Total management of digital signage
- System power control
- Screen control
- View screen
- User management
- Create and send contents
- Schedule management

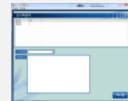
## Central manager



General announcement  
Real time editing  
Remote hardware  
control  
System remote access

<Comprehensive management>

## Separate manager



Separated announcement  
Class guide  
Campus guide  
Guide by floor  
Real time editing

<Concentrative management>

<DB access sharing>

## 24in Wall-hanging monitor 40EA



<Template example>

## 55in Standing Kiosk 30EA



<Template example>

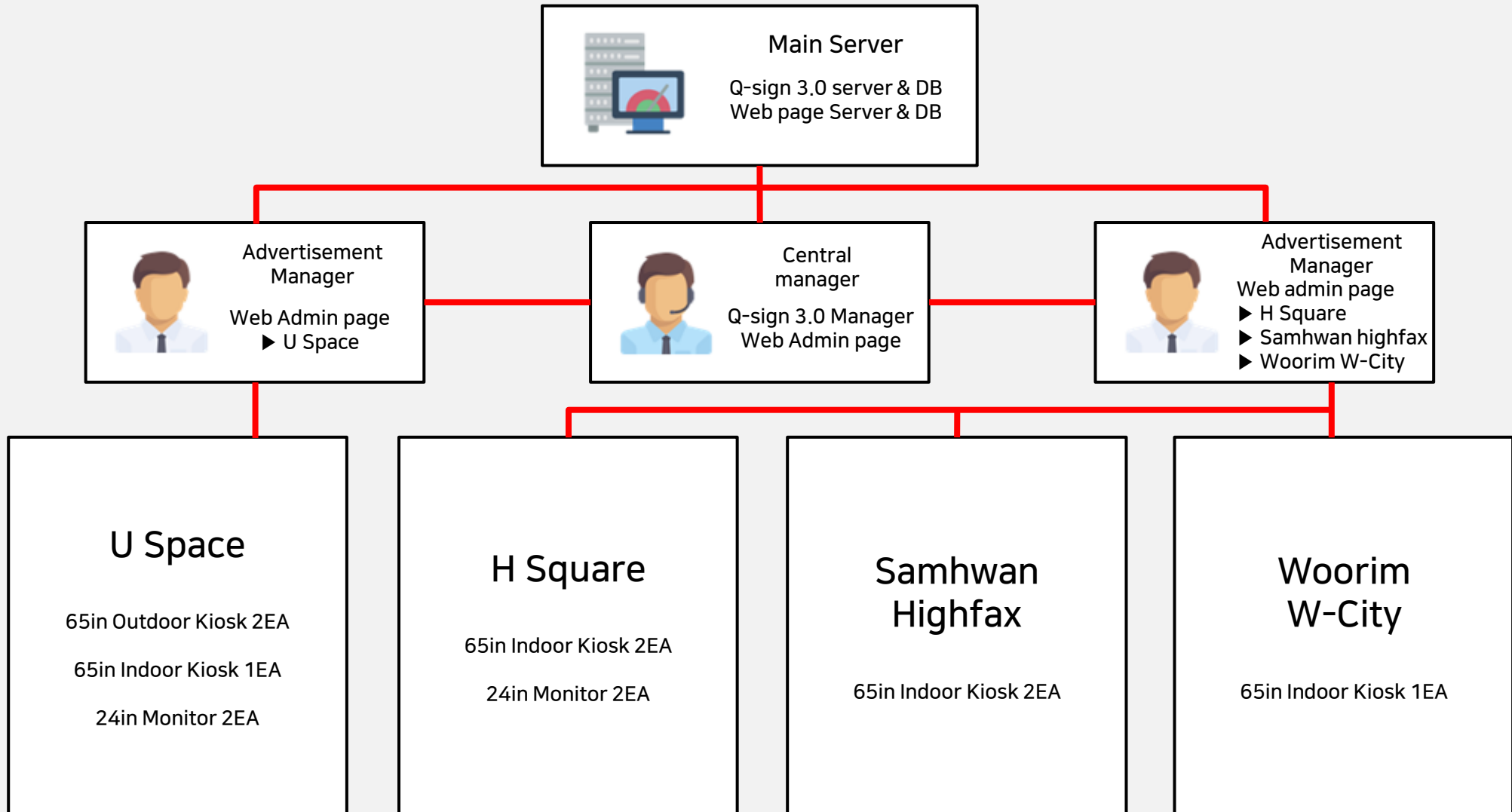
Hanyang univ.  
Event hall reservation website

<Connecting with event website>



Pangyo Techno Valley

Build multi user management server



## High-one Waterpark

## Integrated management server

Integrated server / Management software(CS based)

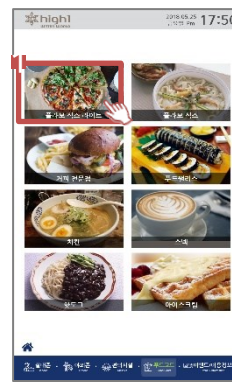


- Total management of digital signage
- System power control
- Screen control
- View screen
- User management
- Create and send contents
- Schedule management

## Contents managing

Change facility info  
Edit contract and event  
Web linkage announcement

## 49in Outdoor Kiosk 19EA(Indoor/Outdoor pool)



&lt;Template Example&gt;

## 49in Outdoor DID 10EA(Ticket box, etc.)

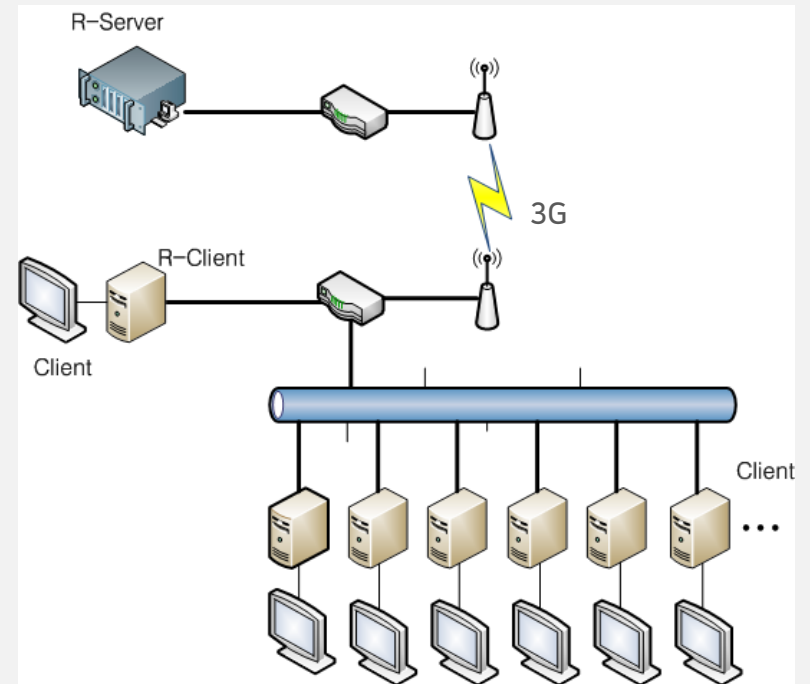


&lt;Announcement or etc.&gt;

## Kunming International Airport

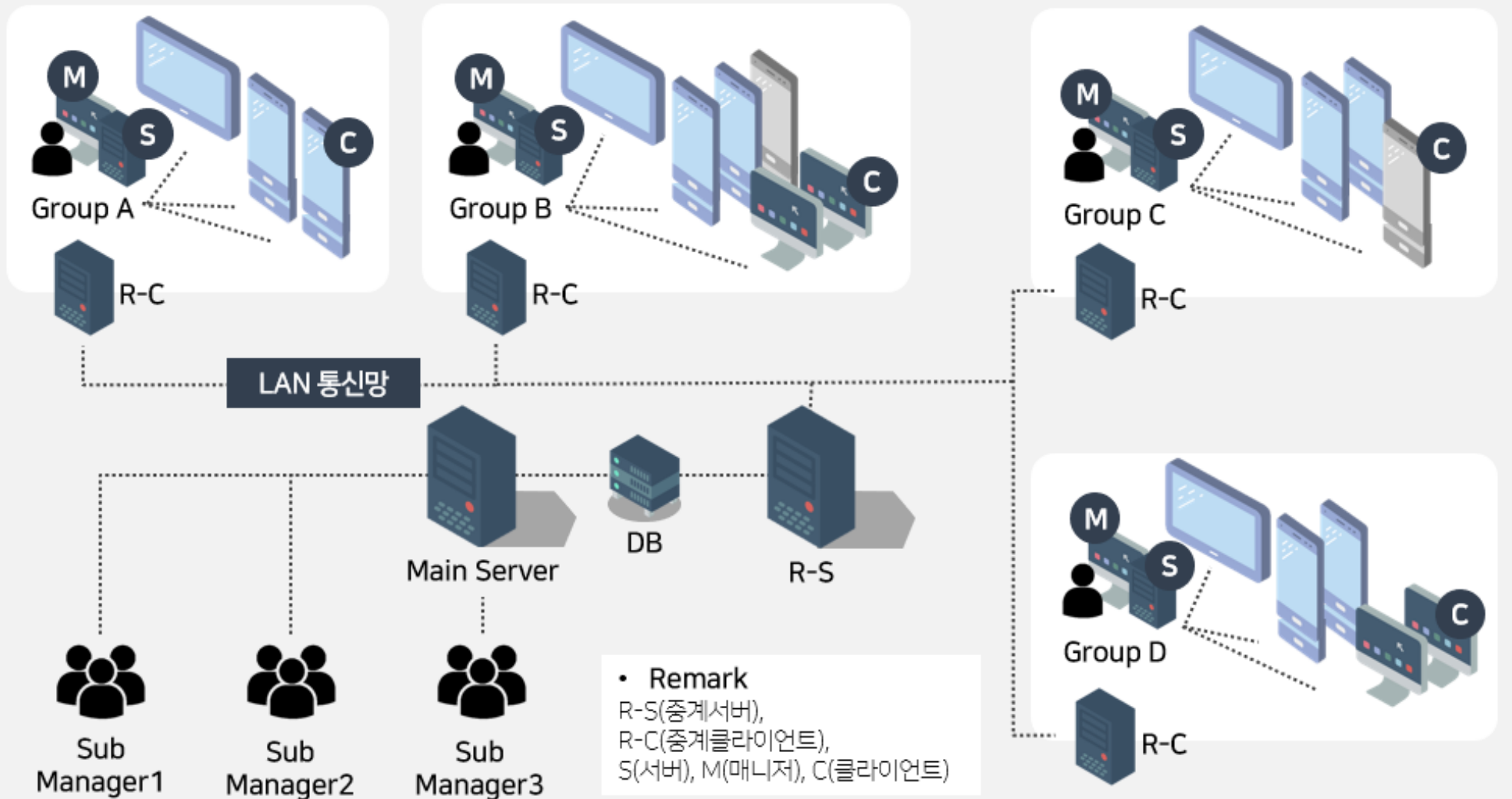
## Network composition using relay server and client

- ✓ External network : 3G IP SEC VPN
- ✓ Internal network : Wi-fi Wireless internet
- ✓ Contents : Commercial video
- ✓ Feature : Contents transmission via 3G and Wi-fi
- ▶ Contents change within 1 sec



## Kunming International Airport

## System Diagram



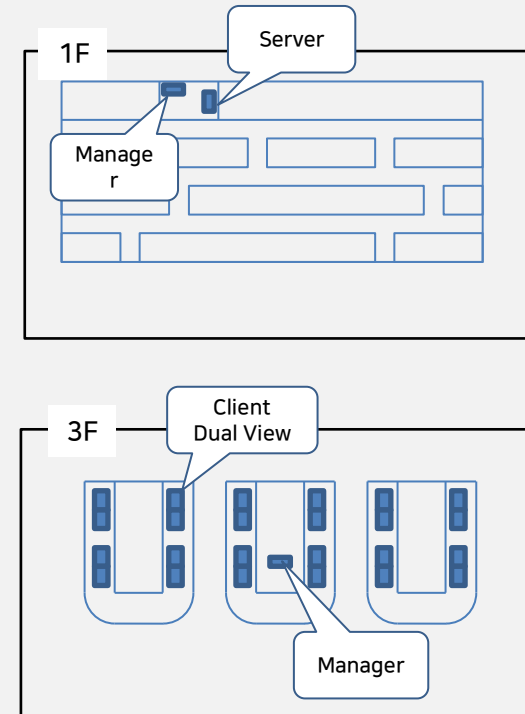
# 08

## Reference

Hangzhou National airport

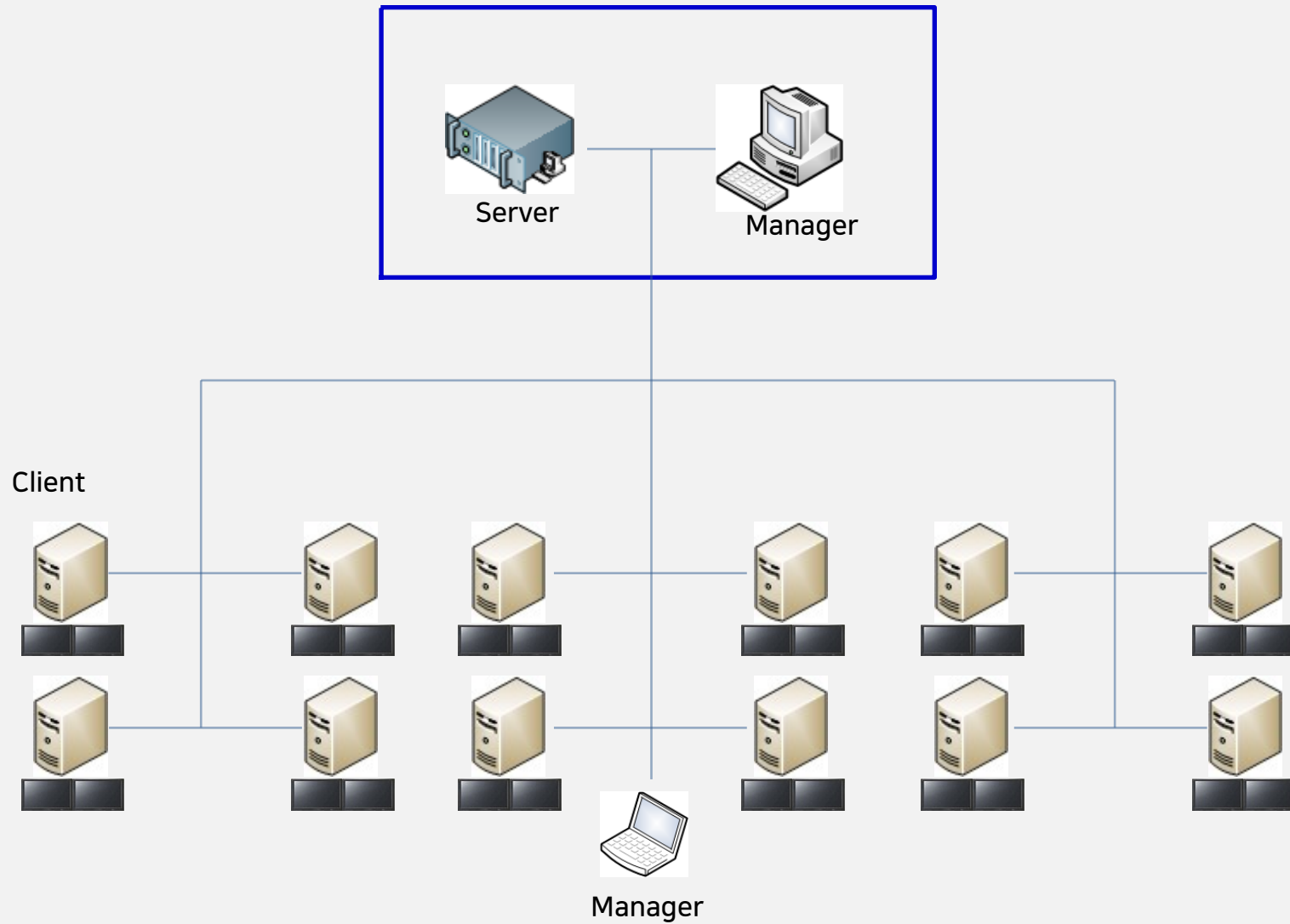
### Emergency notice and Security management

- ✓ External network : 3G IP SEC VPN
- ✓ Internal network : Wi-fi Wireless internet
- ✓ Contents : Emergency broadcast for flight delay
- ✓ Feature : Contents transmission via 3G and Wi-fi
  - ▶ Contents play on repeat using emergency schedule
  - ▶ Censorship mode for the security of contents
  - ▶ Monitor distribution on one client PC (Dual View)



## Hangzhou International Airport

Block diagram of server network





## Seoul National Univ. Hospital

## All ward's display system management include elevators

- ✓ Internal network : Local network
- ✓ Contents : Commercial video, Clinic information, etc.
- ✓ Feature : Individual department use multi manager with one server

Main Building/Others : 48EA  
Clinical Ward : 6EA

Total 54EA

Sort	No.	Location	Quantity(EA)
Main Building	1	DID Touch system	10
	2	4x4 Multi vision	1
	3	Main building elevator	5
	4	Parking lot elevator	1
Children's ward	5	DID Touch system	3
Cancer ward	6	DID Touch system	4
	7	3X3 Multi vision	1
	8	Cancer ward elevator	5
Children's annex	9	DID Touch system	1
	10	Annex elevator	3

## Main Building



## Cancer Ward



## Children's Ward and Elevators

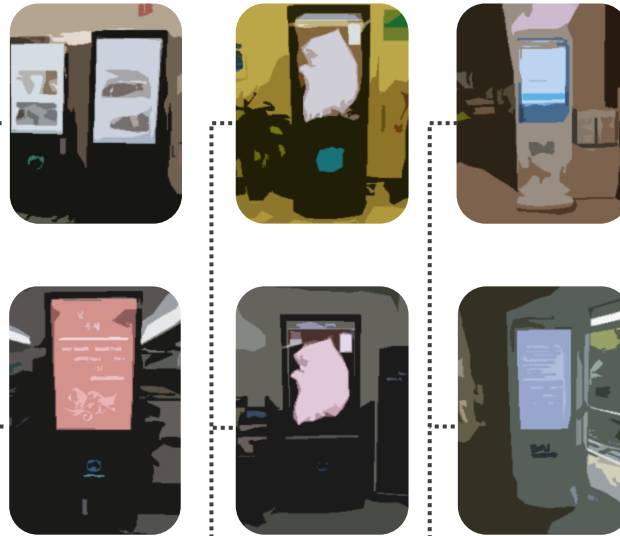




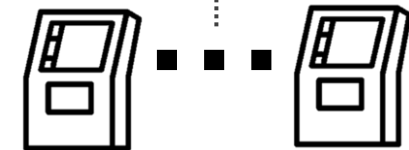
Seoul National Univ. Hospital



Lobby 3X3 Video Wall



LAN Network



VGA or RGB Cable



LAN Network

M2

M3

Main Manager1  
(Main server management)

Original hospital DB server  
(OCS integration, reservation check, etc.)



# THANK YOU

For more information, visit  
<http://www.netds.net>



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