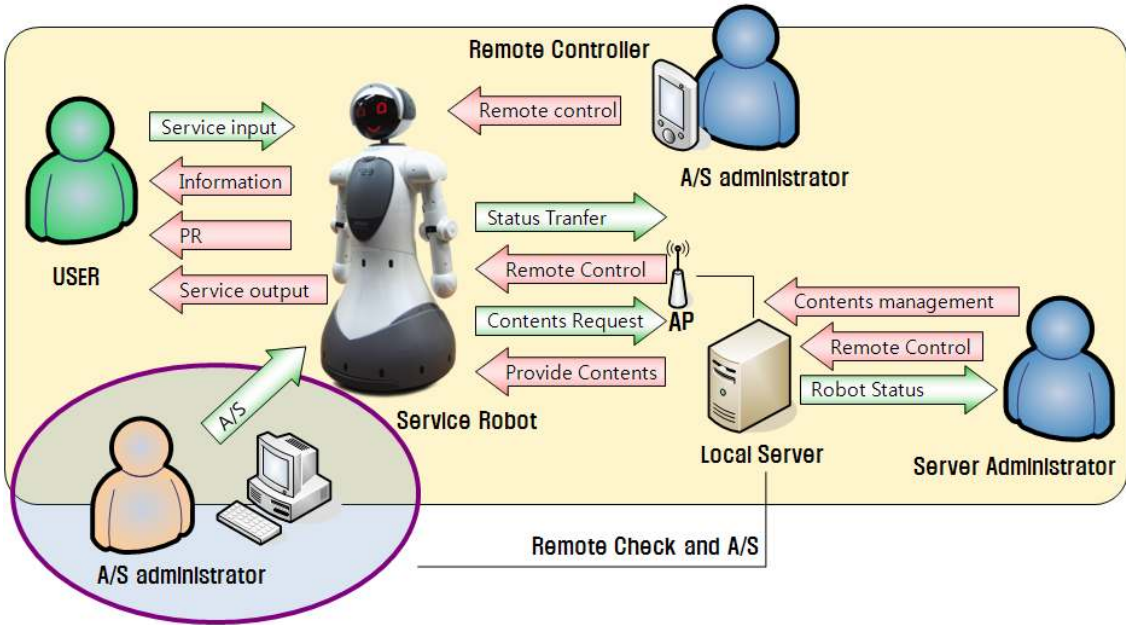


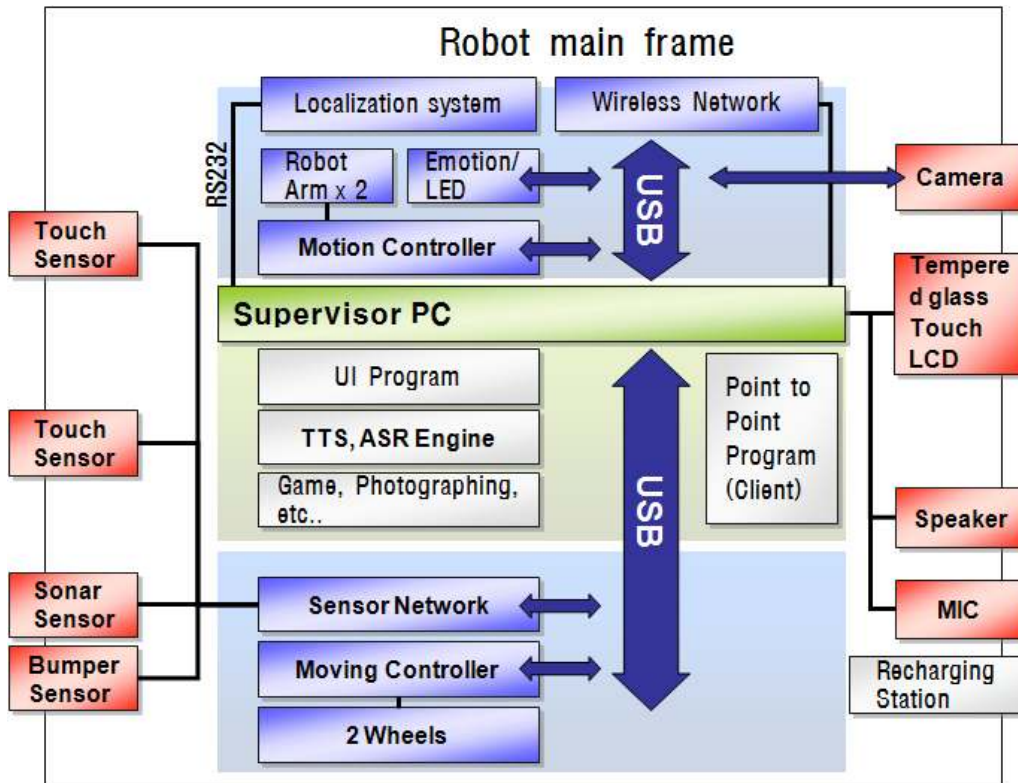
TIRO

■ specifications

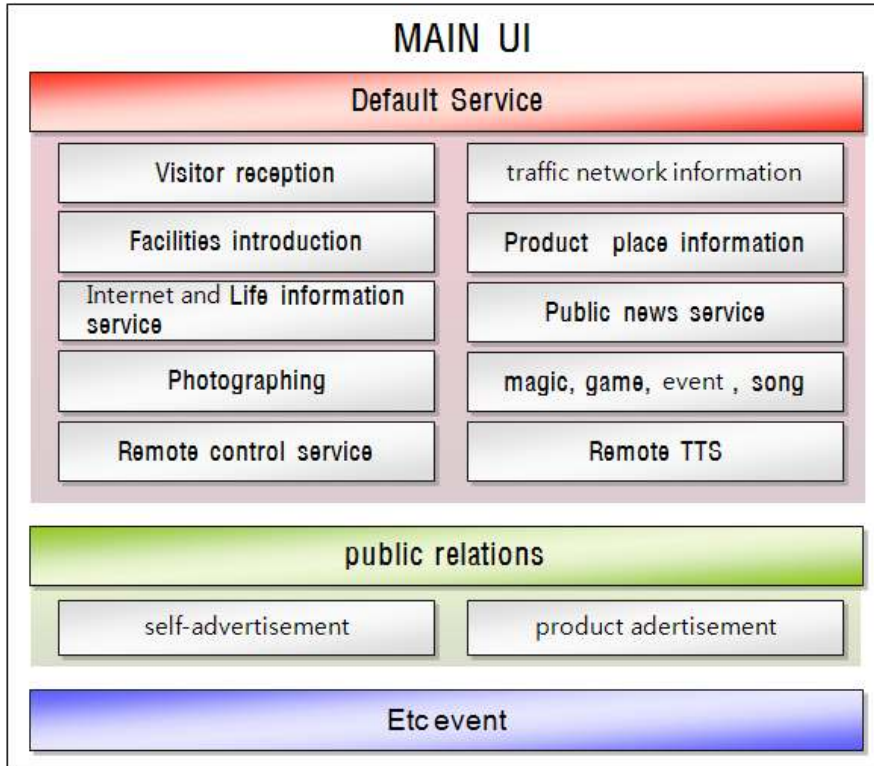
1. Total system organization



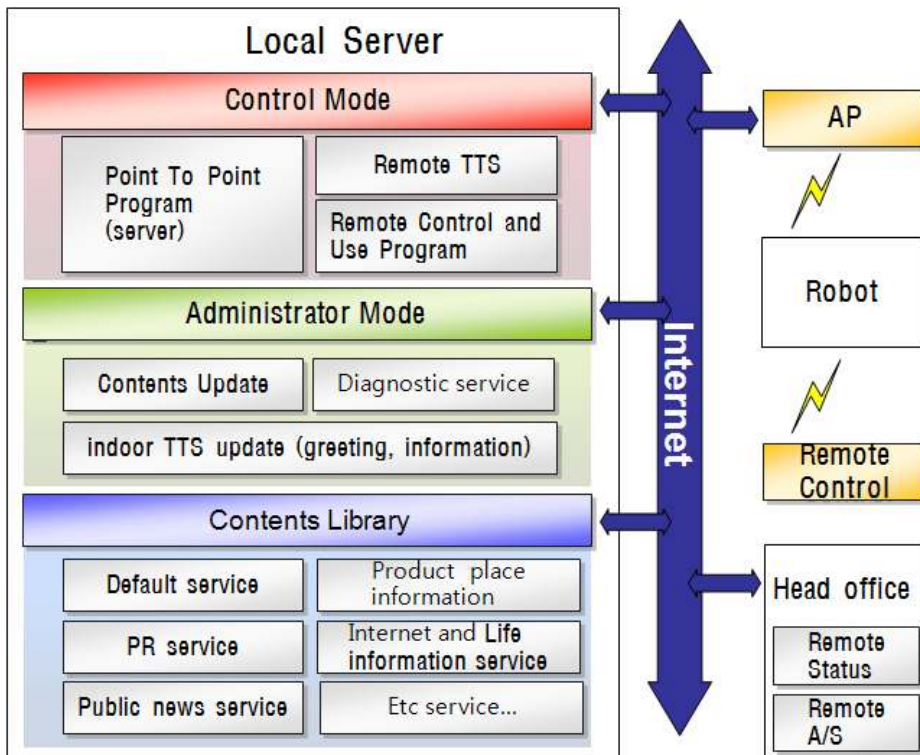
2. Robot main frame



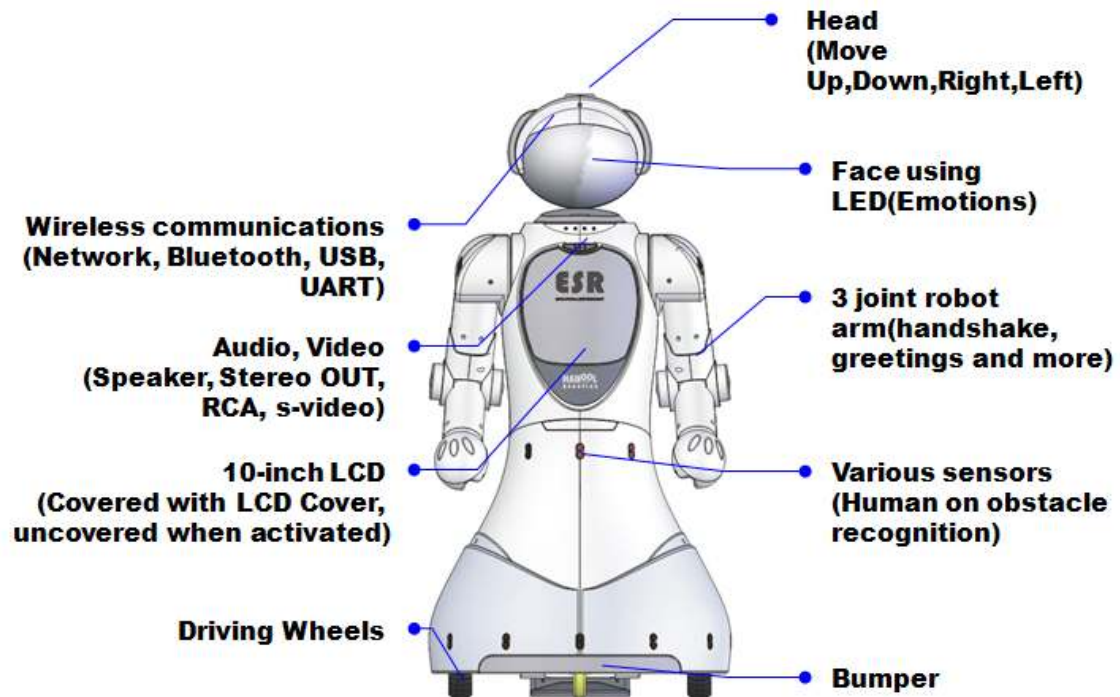
3. Content System



4. Network system



■ Robot details specifications



- Height / weight / width : we will follow your company design decision
- organization : 2Wheel-drive
- Arm : 2 X 3Axis (Non-hand)
- Head : 2Axis, 10 emotion
- motion remote control

① Diff-type Wheel motion system

2 X 50W DC Encoder Motor
 38 Poles Magnet 38 P/R
 gear ratio : 1/61
 rating : 30Kg-cm

② Motion control system

3axis motion control board
 PID Programmable Control
 Control Mode(Position, Velocity or Velocity Profile)
 Encoder Interface(TTL, Open Collector, Line Drive)

③ Voice Control system

Word recognizable engine

Multi-Remicon available

TTS and remote TTS available

④ **Sonar Sensing system**

Supersonic wave sensor(HRC01-SN)

Interface to Computer by USB(Universal Serial Bus)

Sonar sensor control board

Six sonar sensor(40Khz Piezo type)

Measurement Range : Min. 0.2m, Max. 6m

Sampling rate : Max. 18ms(0.2m), Max. 36ms(6m)

Resolution : 9mm

⑤ **High-capacity battery**

High-capacity Li-ion-Polymer Pack

. Product specification : 7S(24V) 20Ah, PCM available

1) Cell : 3.6V, 20Ah

2) Battery Pack Dimension 271(L) x 155(W) x 106(H)

3) Weight : 5.5kg(Aluminium Case)

* Dimension and Weight can be changed with electronic circuits, cases.
and prototypes.

4) PCM default functions

. UVP(Under Voltage protection)

. OVP(Over Voltage Protection)

. OCP(Over Current Protection)

. SCP(Short Current Protection)

. Consumed current less than 1mA

⑥ **Li-ion-Polymer Recharger**

Input : 115/220 VAC 50/60Hz 4A/2A

Output : 24VDC 5A

Recharging type : CC-CV

Battery recognizing method : Voltage check

Display :

- Power Display : Power LED

- Battery remain LED : 30-50-70-85-100% divided by 5 sections.

Cooling : Fan operation when recharging