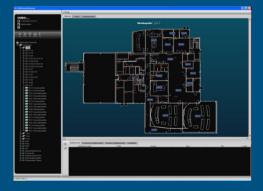




## Intelligent Integrated Systems for Green Buildings

Lonix Automation and Security Solutions since 1996







# Intelligent Integrated Systems for Green Buildings

Lonix provides automation, security and building management systems for Intelligent Green Buildings.

Versatile solutions for offices, business centers, hotels, residential towers, palaces and villas.

- → Building automation / BMS
- → Lighting controls
- → Room controls
- → Consumption metering
- → Home automation
- → Hotel room controls
- → Access control & intruder alarms
- → Video monitoring





### Lonix Ltd



Technology Partner for leading System Integrators



UAE Kuwait Iran Qatar Saudi-Arabia Syria India Finland Sweden Norway Russia Lithuania Estonia Ukraine Turkey Azerbaijan Georgia Uganda Tanzania Kenya Nigeria Egypt Singapore Malaysia Thailand Indonesia **Philippines** 

Intelligent Green Solutions for different building types

- Business facilities
- Office facilities
- Shopping malls
- Blocks of flats
- Villas
- Schools
- Hotels
- Palaces
- Smart cities





# Offices, commercial and public facilities

- Avilon Plaza business center in Moscow, Russia
- Kolomenskaya museum in Moscow, Russia
- Krasnaya Rosza business center in Moscow, Russia
- Pension Fund office in Moscow, Russia
- Cardiological Institute power center in St Petersburg, Russia
- Business center in Rostov, Russia
- Gazprom office in St Petersburg, Russia
- SberBank in Nizhnyi-Novgorod, Russia
- Tax inspection center in Moscow, Russia
- Klaipedos Smelte refrigerator terminal, Lithuania
- Business center in Astana, Kazakhstan
- Karolinska Institutet, research institute in Stockholm, Sweden
- Järfälla kommun school complex, Sweden
- Ektorpshemmet senior home in Nacka, Sweden
- Anantara Desert Islands Resort & Spa on Sir Bani Yas Island, Abu Dhabi, UAE
- Lootah office in Dubai, UAE
- Department of Justice in Helsinki, Finland
- Technopolis technology center in Vantaa, Finland
- Shopping mall Jumbo in Vantaa, Finland
- Headquarters of Senate Properties in Helsinki, Finland
- Water Utility of Helsinki, Finland
- Alarm Center of Civil Defence of Turku, Finland





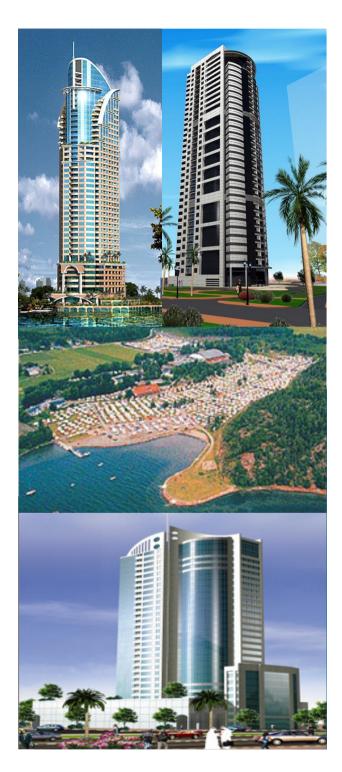




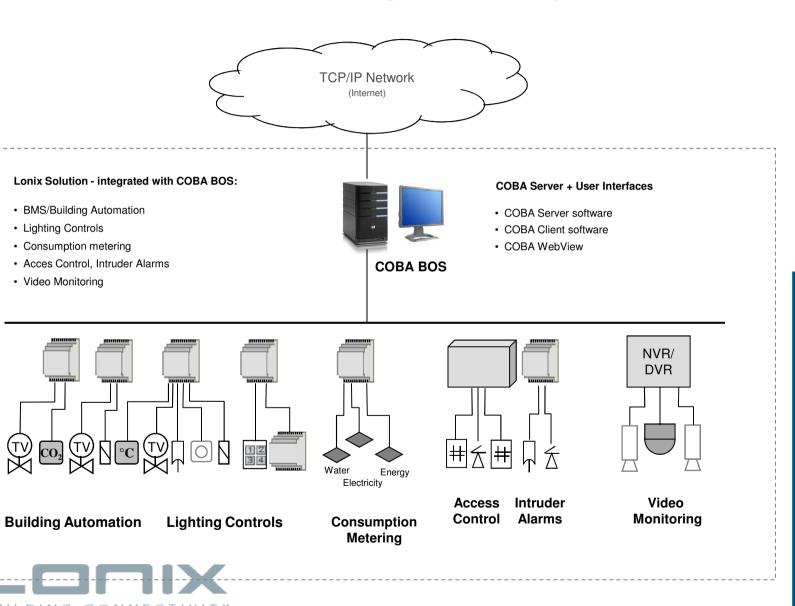
## Residential buildings

- Damac Signature Residence Showroom in Dubai Media City, UAE
- Waleed Paradise residential tower G+34 in Dubai, UAE
- Lootah Marina Tower, luxurious residential tower in Dubai, UAE
- Dorra Bay residential tower G+21 in Dubai, UAE
- Ontario Tower G+25 in Dubai, UAE
- O2 residential tower G+39, Dubai, UAE
- Palace of President of Uginvest, UAE
- Palace of Chairman of Damac, UAE
- Palace of Chairman of Tameer, UAE
- Villa of Mr. Ibrahim Fahim in Dubai, UAE
- Villa of Mr. Hani Nabulsi in Dubai, UAE
- Sharqan villa area in Sharjah, UAE
- Palace of Chairman of Bader Group in Manama, Bahrain
- Village of 600 smart houses in Brunstad, Norway
- Kurkino area of blocks of flats in Moscow, Russia
- Sundsberg intelligent residential area in Kirkkonummi, Finland
- Kaskisaari intelligent residential area in Helsinki, Finland





## Lonix Solution – integrated systems



## Ease of use through versatile media



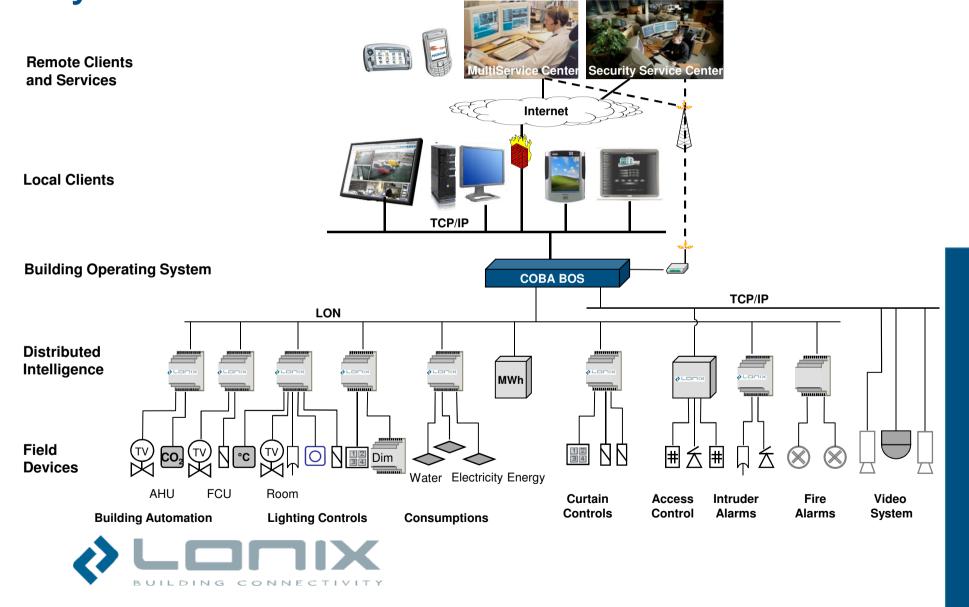


## Central monitoring & life-cycle services





# Integrated automation and security systems



### **Lonix Solutions**

- Building Automation / BMS
- Office Room Controls
- Security
- Hotel Room Controls
- Retail Units
- Home Automation







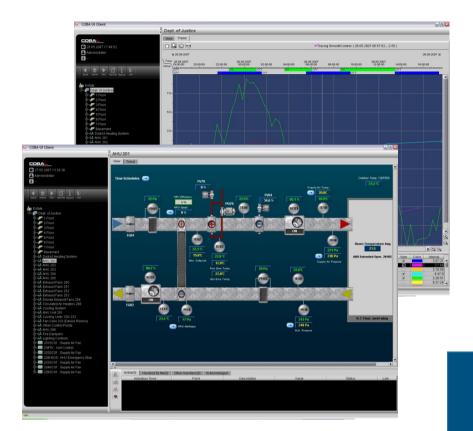




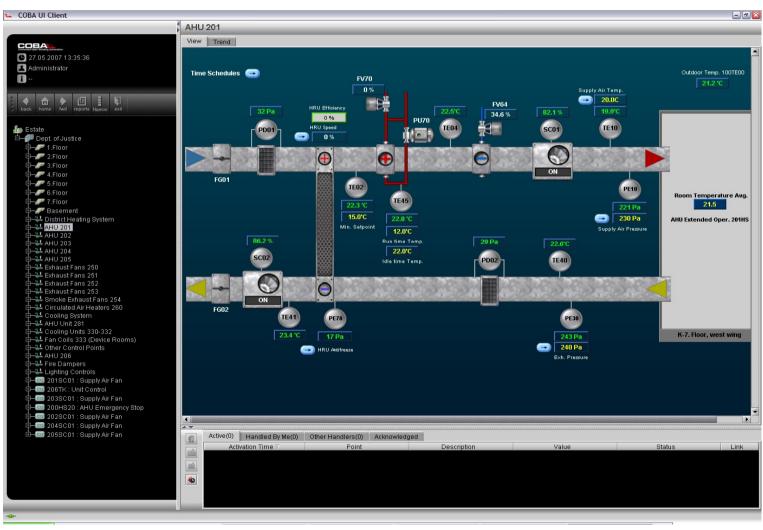
#### Common BMS

- Robust systems
- Accurate controls
  - Chillers/Heat Exchangers (HEX)
  - Chilled water pumps
  - Pressurization units
  - Fresh Air Handling Units (FAHU, AHU)
  - Fan Coil Units (FCU)
  - Water tanks (under ground, over head)
  - Pumps (transfer, booster, sewage, other)
  - Fans (make-up, exhaust, garage, stairwell, smoke)
  - Lighting of common areas
  - Elevator alarms
  - Room controls
  - Consumption metering: Electricity, water, energy
- Integration with security and central battery systems through the common platform



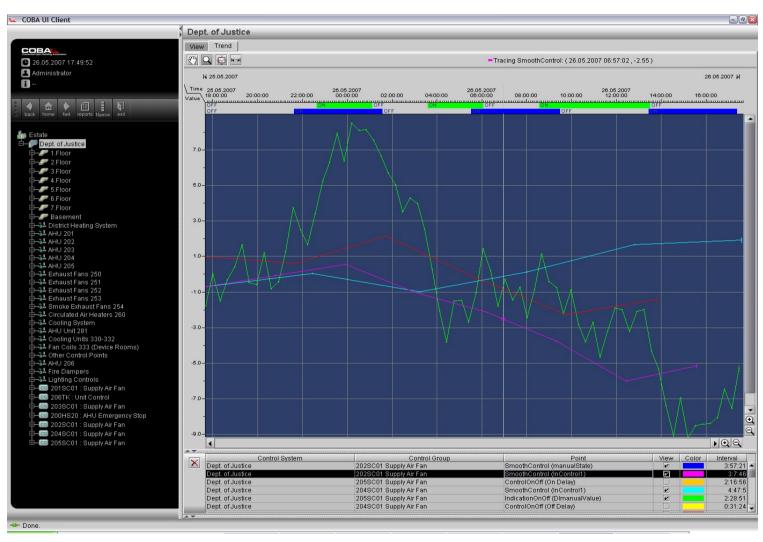


### Monitoring user interface for automation





## History trend view





## Security

- Access control and intruder alarms
  - Complete and fully featured hardware/firmware infrastructure for access control systems
  - IP based integrated solution
  - COBA compliant software
- Digital video monitoring
  - DVR/NVR
  - Cameras
  - COBA compliant software





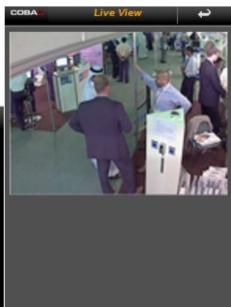
## Monitoring user interface for security





### Cameras

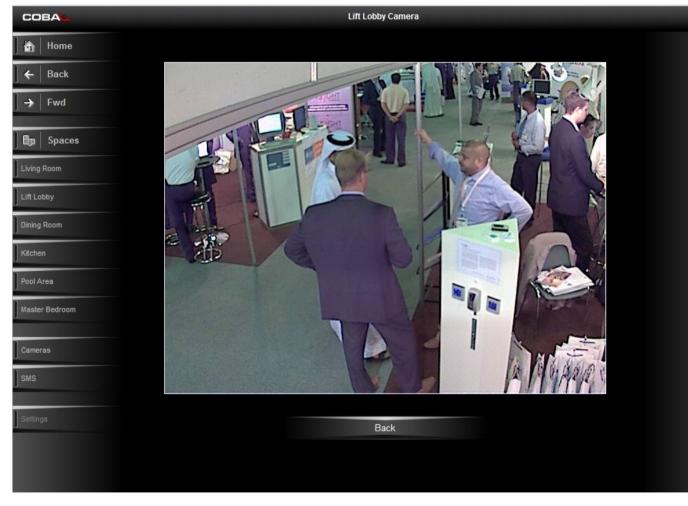


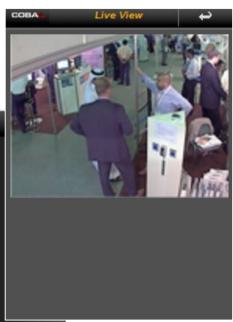






## Video monitoring









#### Hotel room controls

- Room status affects all systems
  - Occupied / unoccupied / sold / vacant
- Energy saving features
  - Temperature setpoint changed with room status
  - Lights off when unoccupied
  - Consumption metering: Clean water, chilled water for A/C, electricity
  - System monitoring and trending

#### Comfort features

- Temperature control, setpoint deviation and fan speed control
- Preset temperature based on occupancy
- Lighting controls, on/off and dimming, scenes, entry lighting upon occupancy
- Curtain controls, open/close, closed automatically upon leave
- Service Call and Do-Not-Disturb

#### User interfaces

- Browser in IPTV
- Main user interface for room controls in the reception
- Integration with BMS and security through the common platform

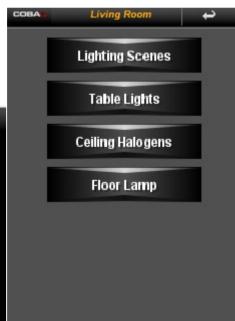


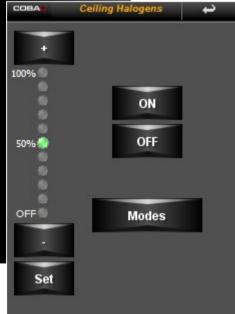


### Individual room

BUILDING CONNECTIVITY







### Browser view in IPTV



#### Retail units

- Systems function smoothly together
  - Staff in / Shop open / Cleaning / Away
- Features
  - Cooling controls
  - Ventilation controls
  - Lighting controls
  - Consumption metering: Water, electricity, energy
  - Access control and burglar alarms
  - Cameras and video monitoring
- Integration with common BMS and security



#### Home automation

- Modes of the residence
  - Home / Away / AwayLong / Night / Special
- Cooling controls
- Ventilation / air-handling controls
- Lighting controls
- Curtain and shade controls
- Access control
- Burglar alarms
- Consumption metering: Water, electricity, energy
- Leakage alarms
- Cameras
- Touch screen panel PC
  - Mode settings, lighting controls, cameras, AV controls, etc
- Graphical browser-based user interface
- Integration with common BMS and security





#### Browser-based user interface

#### Ease of use through versatile media



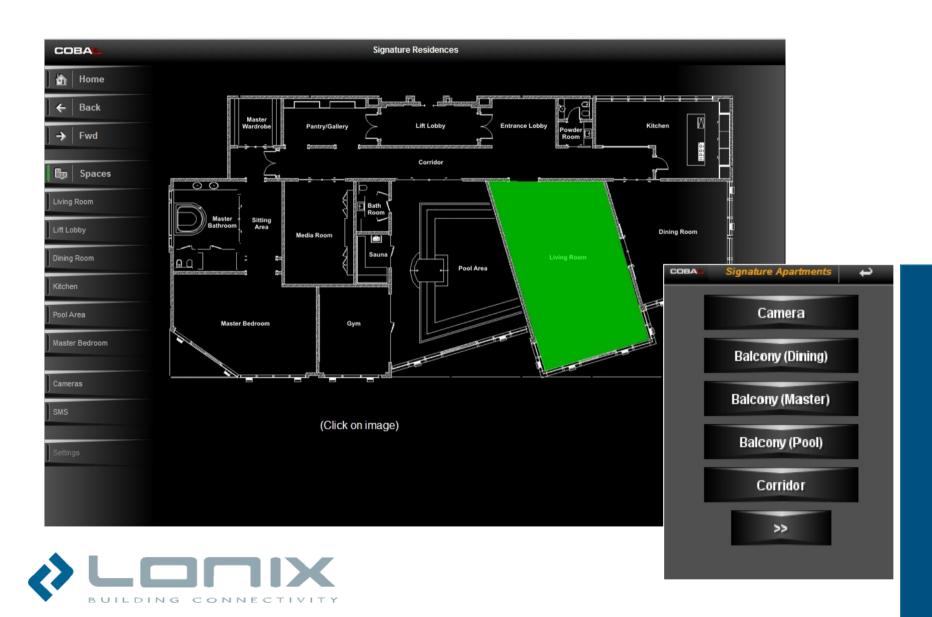




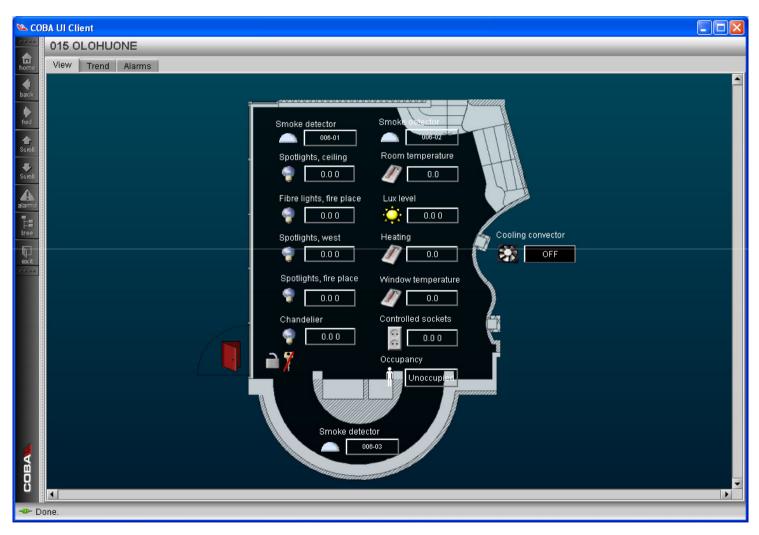




#### Room menu



## Integrated systems in a room





## Contribution to Green Buildings

- Energy and Atmosphere
  - Reduced energy consumption
  - Controls, measurement and verification
- Water efficiency
  - Water use reduction
- Indoor Environment Quality
  - Outdoor air delivery monitoring and control
  - Thermal comfort design, controls and verification
  - Lighting controls
- Innovation in Design



### Benefits of Lonix systems

#### Green Buildings with Forefront Technology

- Energy savings
- Indoor comfort
- Versatile features
- Cutting-edge technologies
- Integrated systems easy to use
- User-friendly interfaces through any device
- Automatic monitoring and adjustment of all systems
- Efficient enabler of sustainable development and Green Buildings







Thank you!