



**NS**

**18**

**NIAGARA  
SUMMIT**

**CONNECTING  
THE WORLD**



# Hotel of Things

*William Achury*  
*President*  
*Sanko Telecom*

g  
s,  
vices,



# The Prince Gallery Tokyo Kioicho



## Data:

---

Opening : July 27, 2016

Floors : 30~36 7 Floors

Rooms : 250

Size : 42~148m<sup>2</sup>

## Prince Category Brand

---



THE LUXURY COLLECTION  
Starwood Hotels & Resorts

# Prix Versailles Award)2016



The Prix Versailles is an annual award dedicated to commercial architecture which was inaugurated in 2015. Discerned at the headquarters of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, it encompasses several categories, with the winners being selected by an independent judges panel. It is the world architecture award for stores, hotels and restaurants.



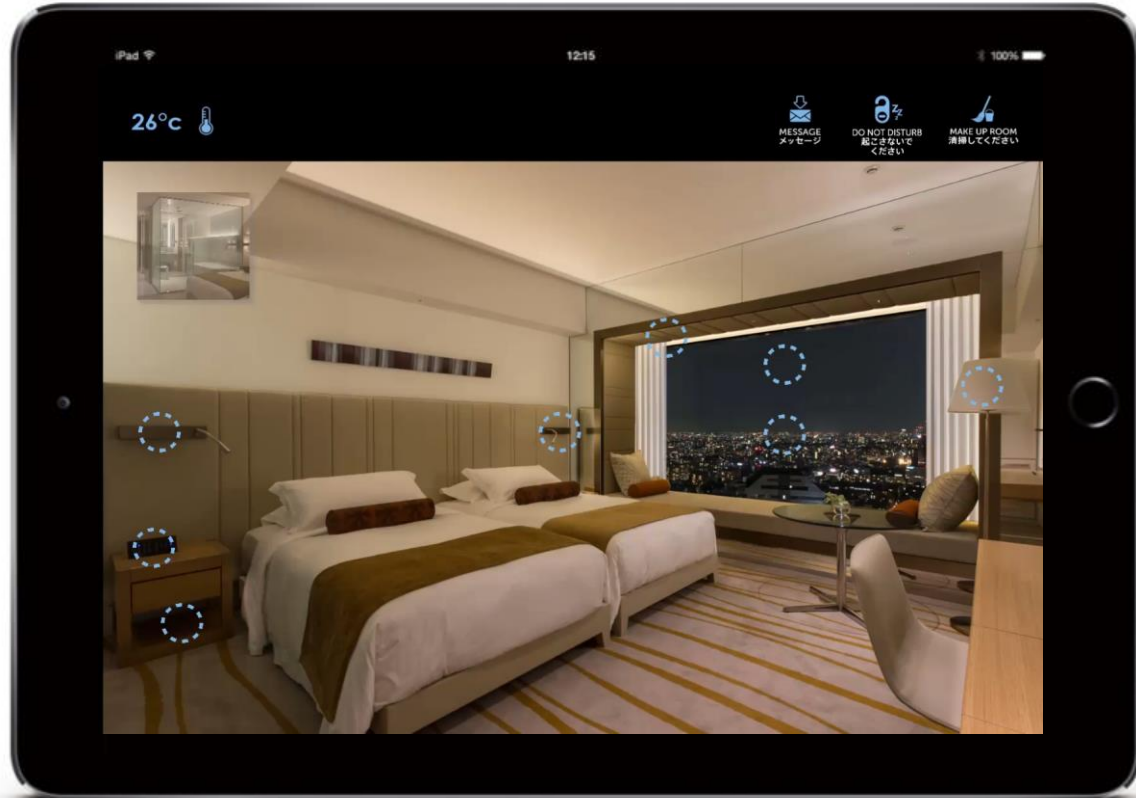
11:57



Welcome Scene



# Room Control





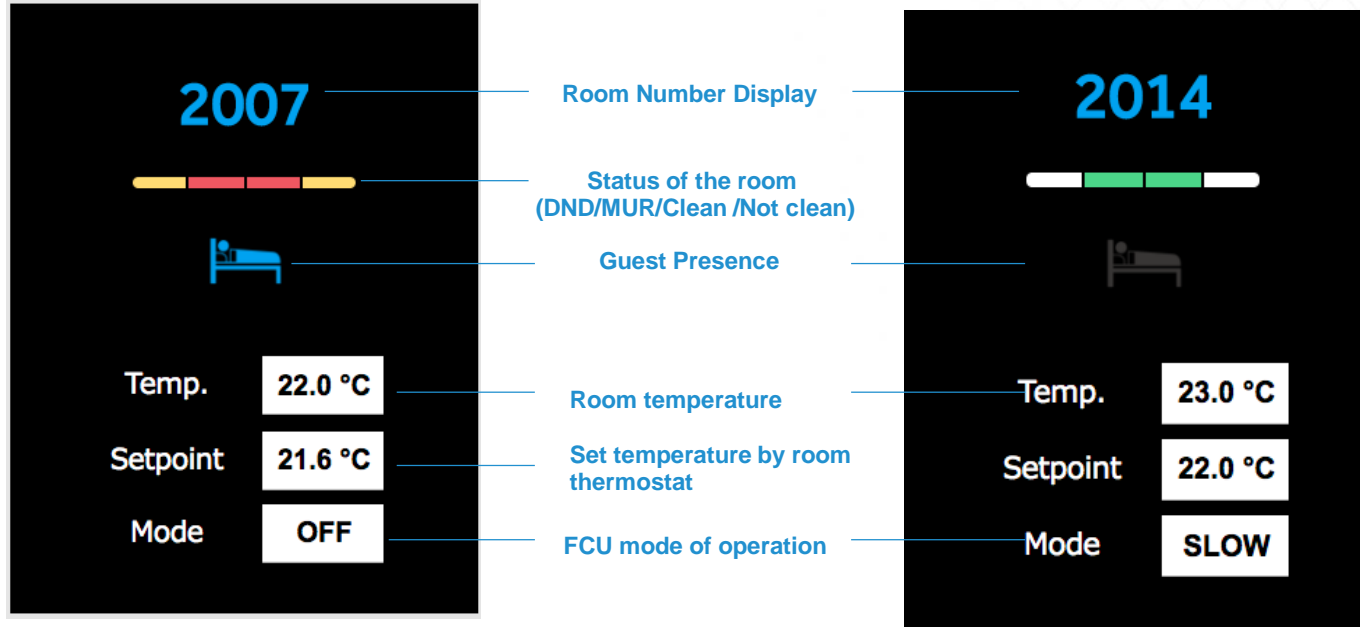
# Simple Floor Indicator: Guest Room Visualization



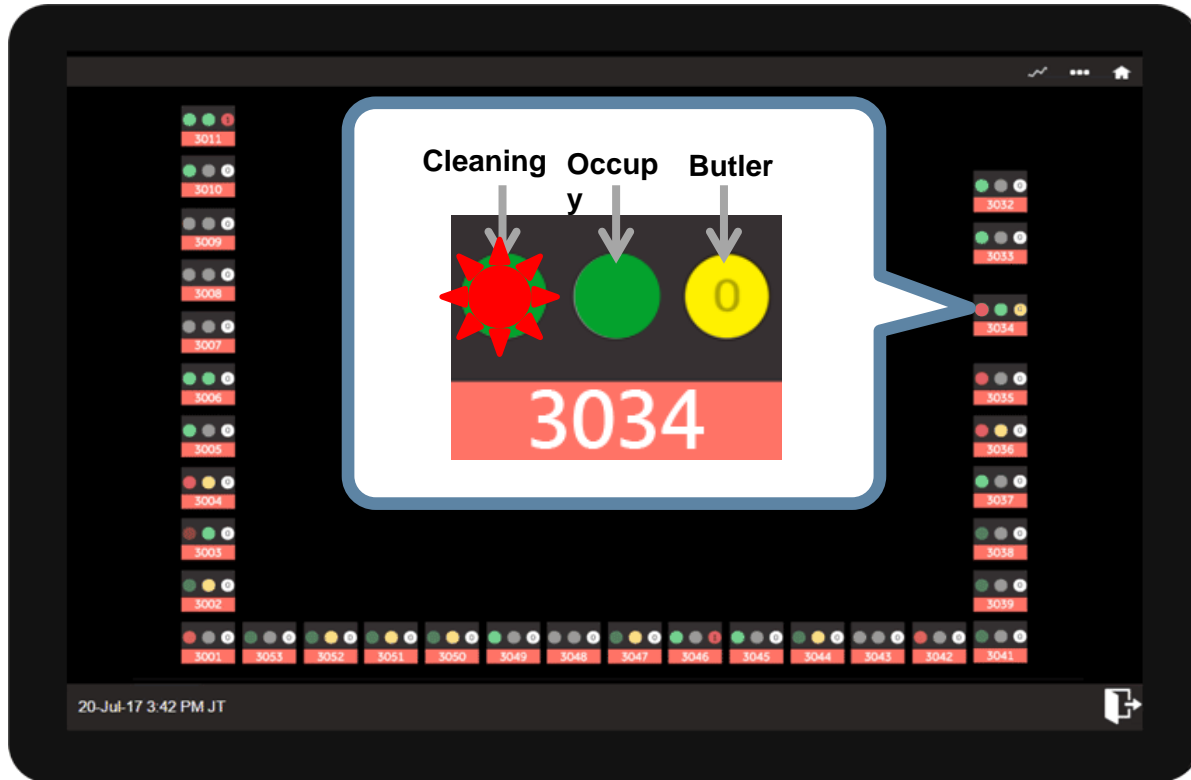
Same Indicator as Corridor Panel  
On your PC/ Tablet/ Smart Phone



# Guest Room Visualization: Status of each room



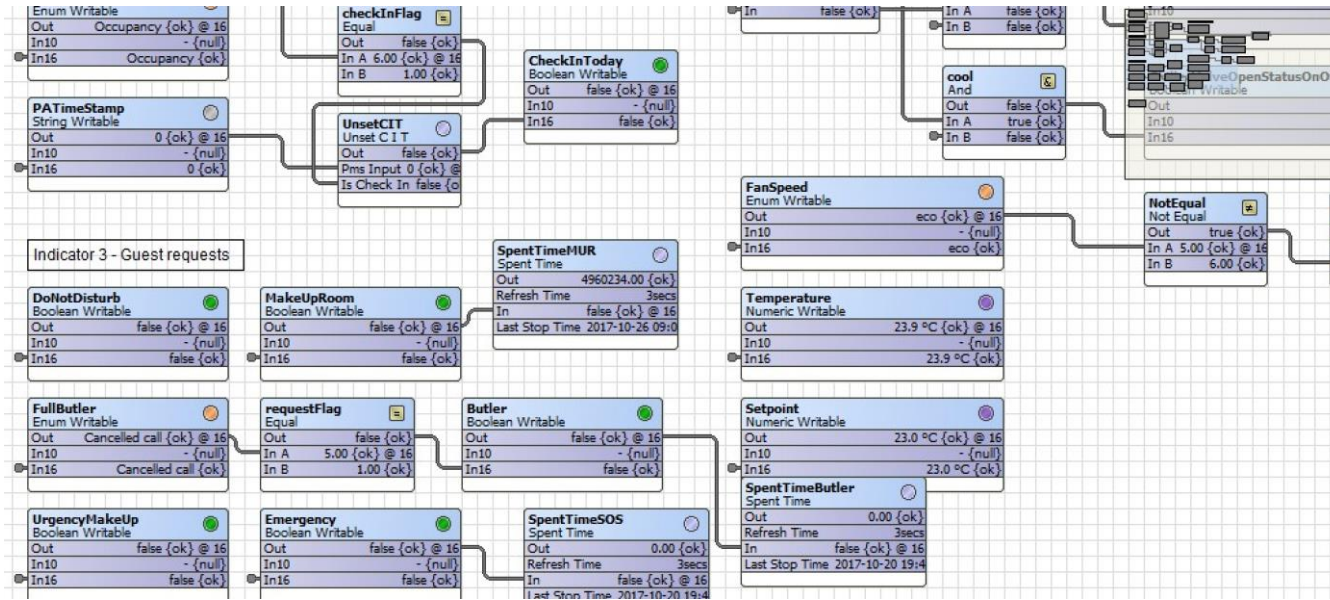
# Floor Indicator: Guest Request Visualization



## Indication Example

Check in	● ○ ○
Plan to leave today	● ○ ○
Late Check out	★ ○ ○
Check out (Need Cleaning)	● ○ ○
Out of service	● ○ ○
Cleaning	★ ○ ○
Waiting for check	★ ○ ○
Accept cleaning/Vacant	○ ○ ○
Occup	○ ● ○
Un-Occup	○ ○ ○
Assign	○ ● ○
Emergency cleaning	○ ○ ★
DND	○ ○ ●
MUR	○ ○ ●
Alert	○ ○ ★
Butler	○ ○ ●

# Floor Indicator: Guest Request Visualization



## Indication Example

Check in

Plan to leave today

Late Check out

Check out  
(Need Cleaning)

Out of service

Cleaning

Waiting for check

Accept cleaning/Vacant

Occupy

Un-Occupy

Assign

Emergency cleaning

DND

MUR

Alert

Butler

# Room Status Listview

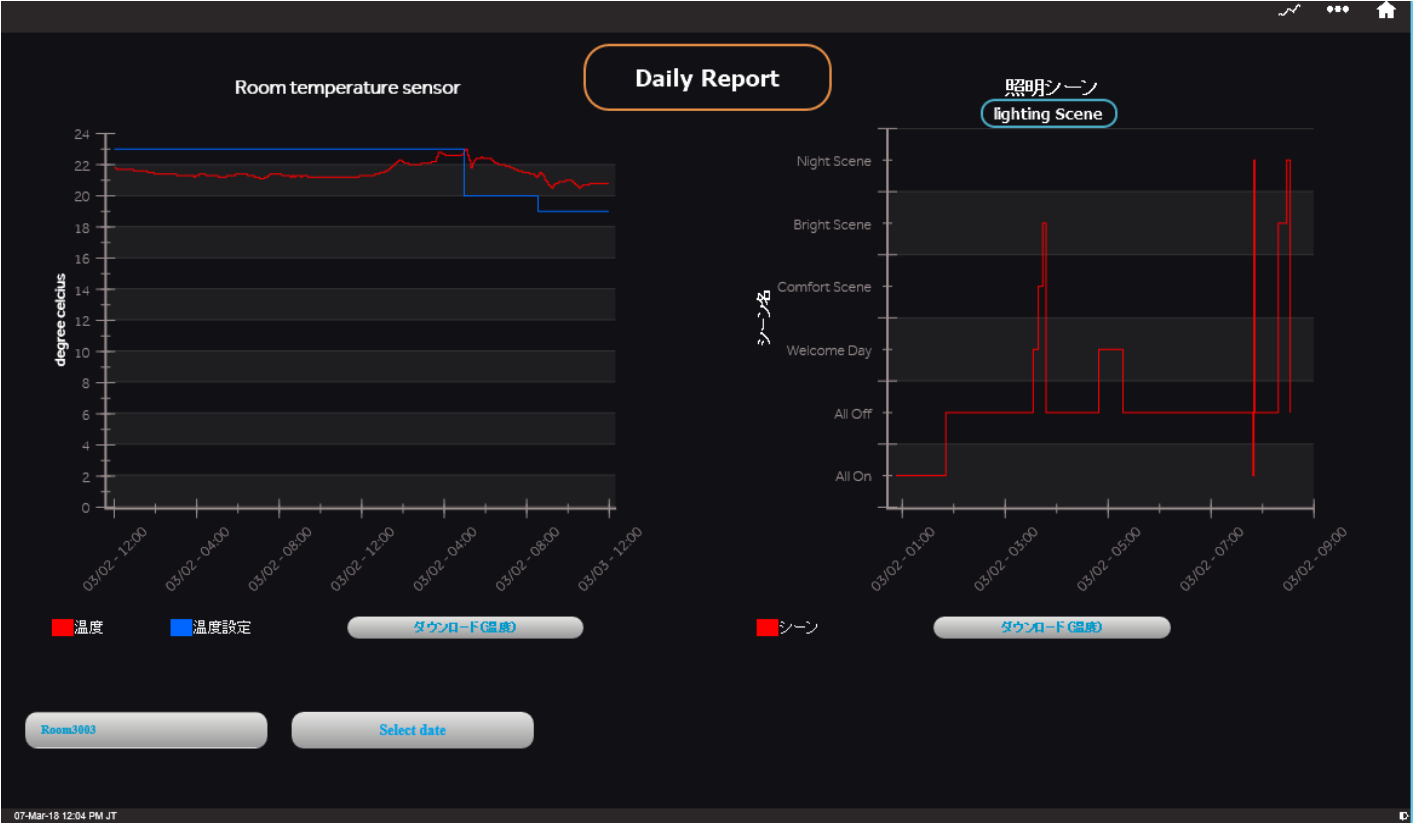
The screenshot displays a room status listview with columns for room numbers (30F to 36F) and various status indicators. Callouts highlight specific features:

- Check In Time:** Points to the 'チェックイン' (Check In) column.
- In/Out Room:** Points to the '在不在' (In/Out) column.
- PassBox:** Points to the 'パスボックス' (Pass Box) column.
- Make Up Room Request List:** Points to the 'Make Up Room' column.
- Pass Box Status List:** Points to the 'パスボックス' column.
- SOS Alarm List:** Points to the 'SOS' column.

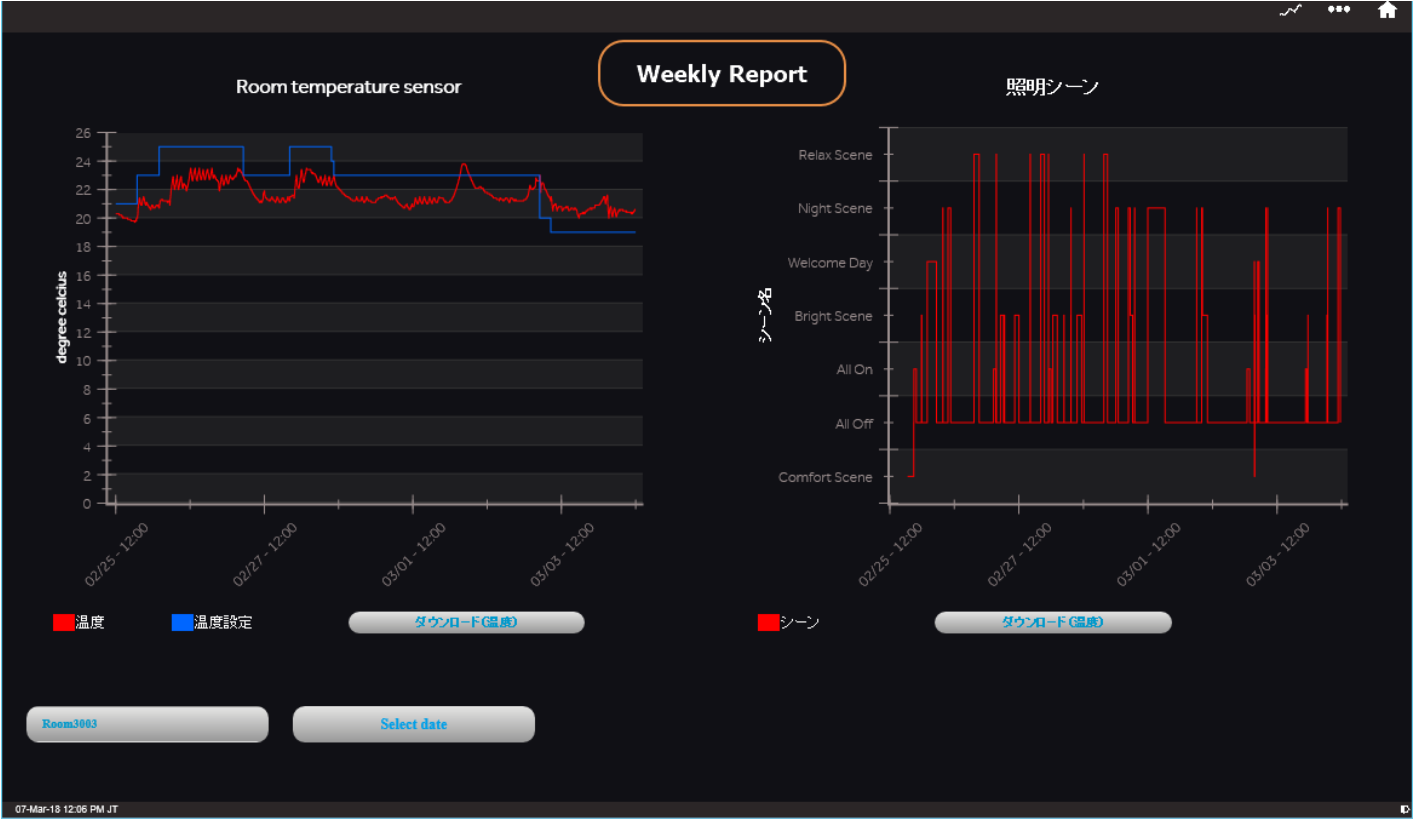
30F	31F	32F	33F	34F	35F	36F
部屋番号	チェックイン	在不在	Do Not Disturb	Make Up Room	SOS	パスボックス
3001	20-Oct-17 7:46 PM	26-Oct-17 9:01 AM				
3002	06-Mar-18 5:52 PM	07-Mar-18 11:02 PM				
3003						
3004	05-Mar-18 11:07 PM	08-Mar-18 8:19 AM				
3005	06-Mar-18 11:35 PM	08-Mar-18 9:16 AM		08-Mar-18 9:15 AM		
3006	06-Mar-18 9:59 PM	08-Mar-18 8:28 AM				
3007		07-Mar-18 2:39 PM				
3008		07-Mar-18 2:37 PM				
3009	06-Mar-18 11:37 AM	06-Mar-18 9:19 PM				
3010	06-Mar-18 3:56 PM	08-Mar-18 8:32 AM				
3011	03-Mar-18 1:38 PM	03-Mar-18 1:43 PM				
3032	04-Mar-18 3:45 PM	04-Mar-18 3:55 PM				
3033	04-Mar-18 4:26 PM	08-Mar-18 8:24 AM		07-Mar-18 11:50 PM		
3034	05-Mar-18 4:51 PM	08-Mar-18 7:43 AM				
3035	06-Mar-18 5:47 PM	08-Mar-18 9:03 AM				

08-Mar-18 9:31 AM JT

# Room Status History Report (Daily)



# Room status History Report (Weekly)



# Pre Arrival Preparation



## Guest Profile



Room  
light:  
Bright  
Room  
temp



# Everything at your fingertips



Express check in / out



Mobile key



Lighting



Air conditioning



Curtain

IPTV

IP phone

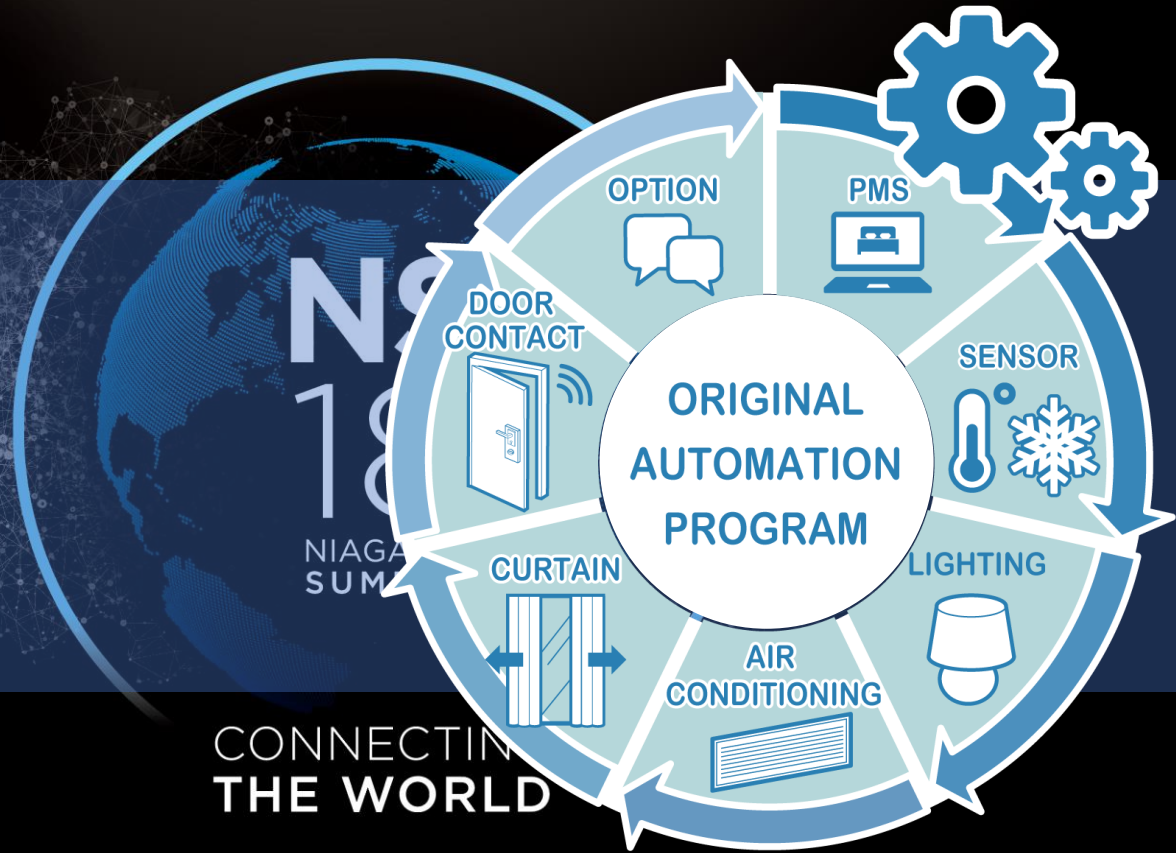
NIAGARA  
SUMMIT



CONNECTING  
THE WORLD

# Hotel of Things

HoT  
XXX.



## GUEST ROOM TECH



ROOM CONTROL DEVICES



MOBILE KEY



ENERGY MANAGEMENT



INTERACTIVE DIGITAL SIGNAGE



IPTV

## MOBILE ENGAGEMENT



MOBILE ENGAGEMENT



MOBILE PAYMENT



MOBILE APP FOR CUSTOMER USE

## SMART WIFI SOLUTION



BANDWIDTH



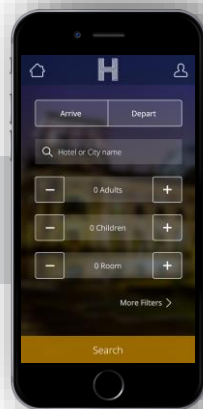
LOCATION BASED TECH



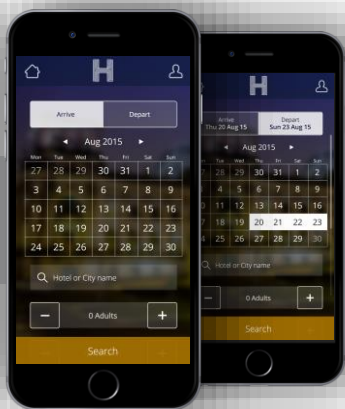
TABLET AT FRONT DESK

# Guest Experience

## Pre-arrival: Booking



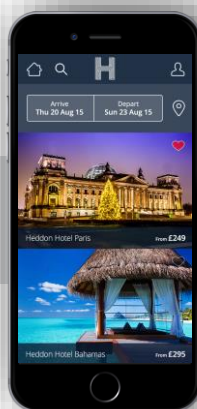
ホーム検索画面  
(予約がない状態)



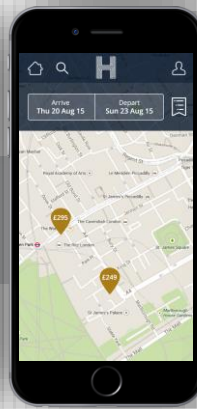
日付選択



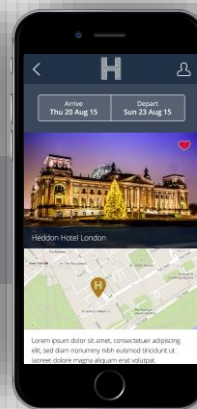
検索フィルター



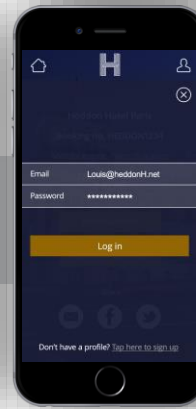
検索結果 - リスト表示



検索結果 - 地図表示



ホテル概要



サインイン/承認

# Guest Experience : Smart Front Kiosk

At arrival



Copyright © Sanko Telecom Co.,Ltd.  
All rights reserved.

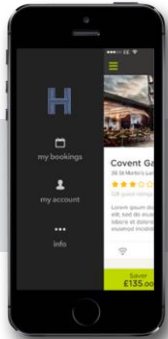
# Smart Access Control

Mobility × Key × Converge Infrastructure



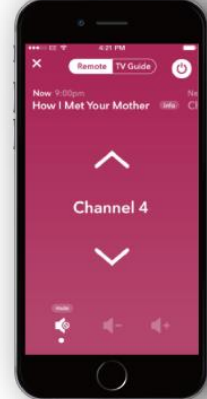
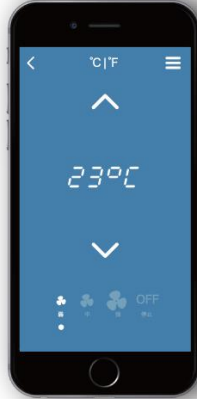
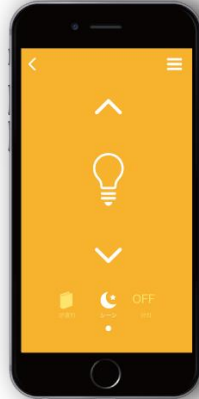
# Mobile Key

Mobility × Key × Elevator & Room Door



# Smart User Interface

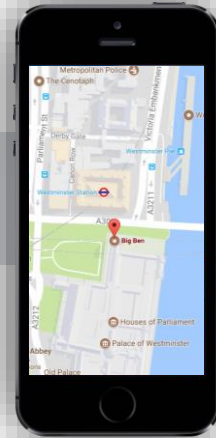
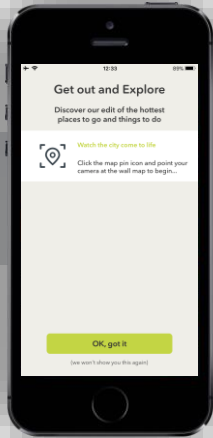
Universal Design = Simple × Icons





# Smart Life Style Hotel

Augmented Reality=Localization × 演出

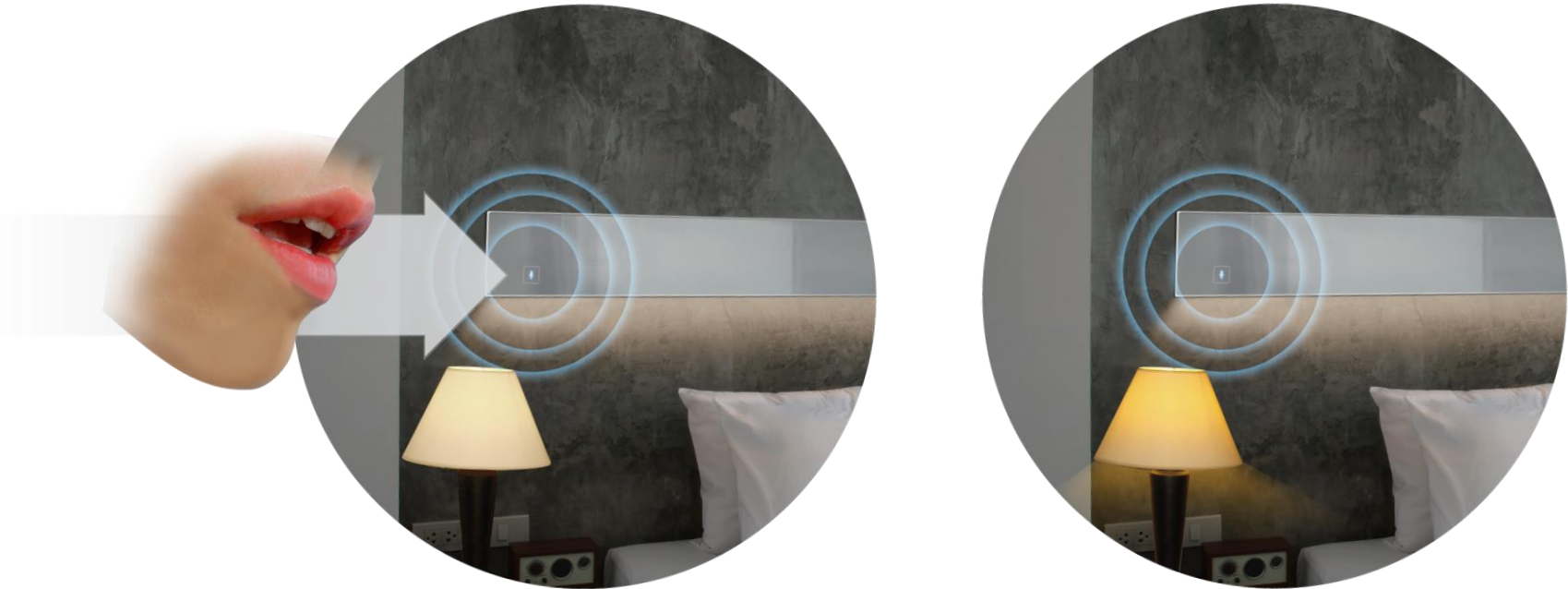


Copyright © Sanko Telecom Co.,Ltd.  
All rights reserved.

DEMO

# Voice Control

English and Japanese



# Smart Digital Mirror

Touch screen × Multilingual touch display

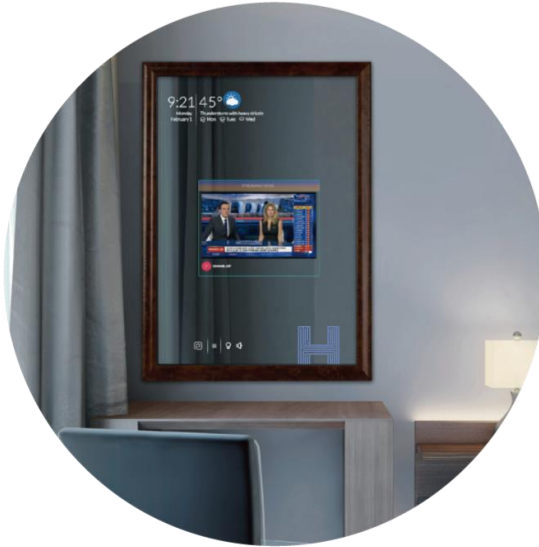
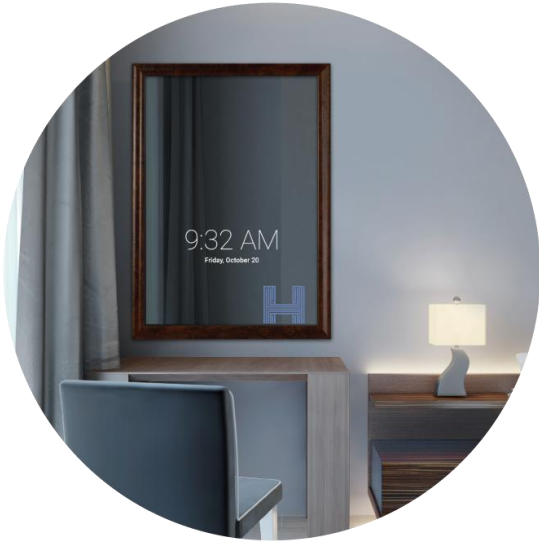


# Smart Digital Mirror



# Smart Digital Mirror

Space Saving= Mirror x TV



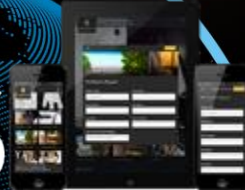
DEMO

# INTEGRATION

Mobility, IP TV, Housekeeping INTEGRATIONS



API



8



NIAGARA  
SUMMIT



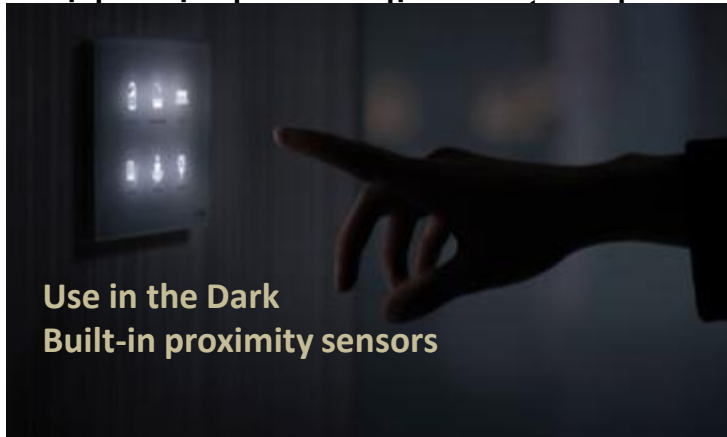
API's make integrations between the above vendors and the Guest Room Management System seamless. API was created in a "open" manner so that the integration with many other IP-TV Vendors is possible or easy to achieve.



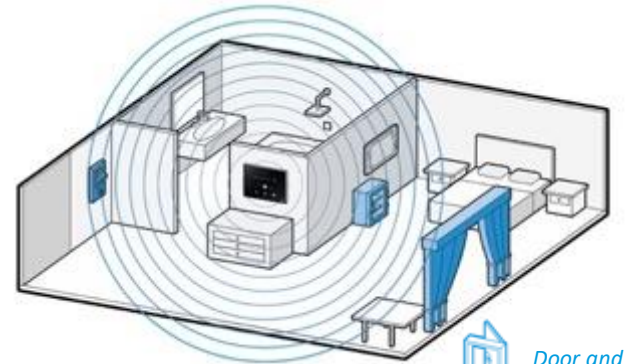
# Intelligent Touch Technology

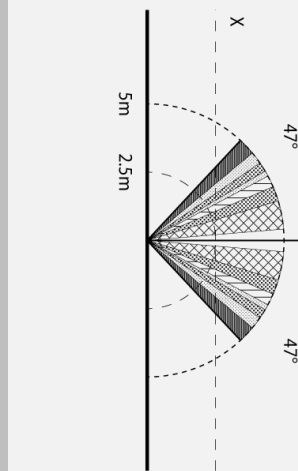
## Future-proofing hotels

**INTEREL** devices are equipped with Bluetooth Low Energy antennas and create a property-



Each Touch panel can be custom designed to meet the room

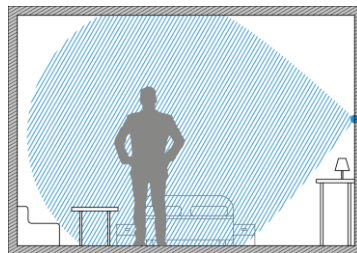




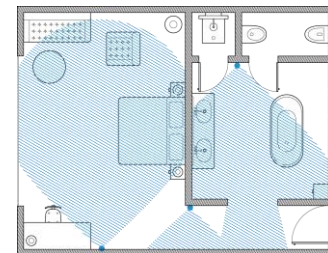
Motion sensor range (top view)

## Built-in Motion Sensors

- Savings on containment and cabling (labor costs for installation)
- Savings on cost of external motion sensor



Motion sensor coverage (side view)



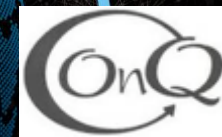
Motion sensor coverage (top view)

# INTEGRATION

Mobility, IP TV, Housekeeping INTEGRATIONS



NS  
digivalet  
TO



TING  
RLD



API's make integrations between the above vendors and the INTEREL Guest Room Management System seamless. INTEREL API was created in a "open" manner so that the integration with many other IP-TV Vendors is possible or easy to achieve.

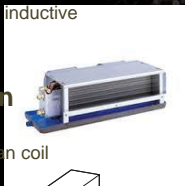
# GRMS – BMS Integration



# System layout

## A On/Off Lighting Control

All relays of the RCU are rated at 10A for resistive loads and 2A inductive loads



## B Thermoregulation

Fan Coil Unit  
Control of floor heating, fan coil units, heaters, etc.  
Actuator Valves  
Control of on/off, floating and modulating valve actuators.



## C Primary Field Devices

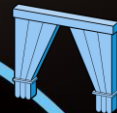


## D Sensors & Switches



## E Curtain/Sheer control

Multiple control options from 1 to 3 buttons with features like one-touch and hold/ release.



## H Operator Console and Central Monitoring Platform



- Applications, Interface with PMS and other 3<sup>rd</sup> parties
- SQL Database
- OS: Windows Server 2012

Hotel Converged TCP/IP Network with RMS VLAN

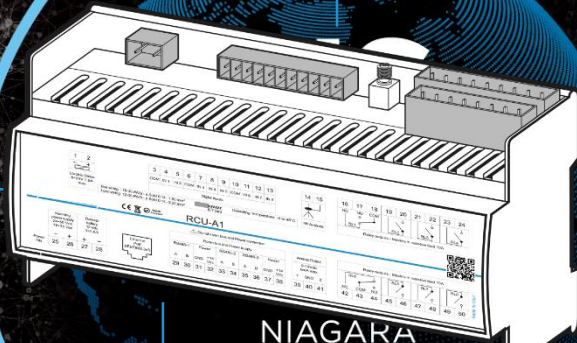
TCP/IP Communication ensures reduced latency times

BMS / Housekeeping Stations

## F Wireless Communication

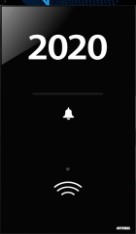


## G Expansion Modules for dimming, DALI, DMX



RS485-1 (Modbus)

NIAGARA SUMMIT

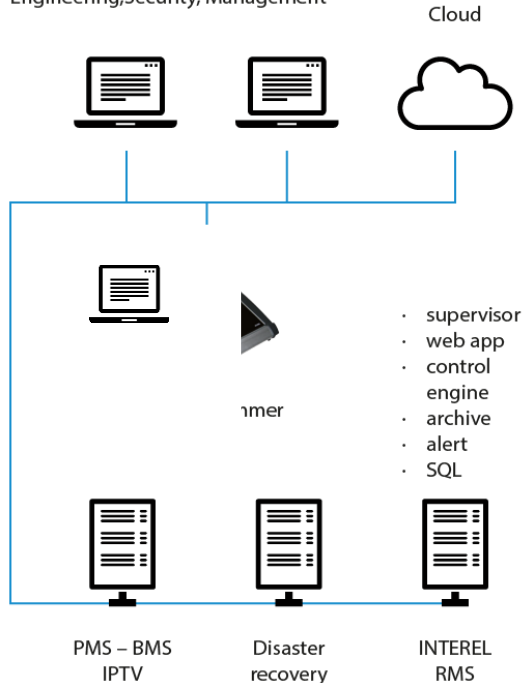


CONNECTING THE WORLD

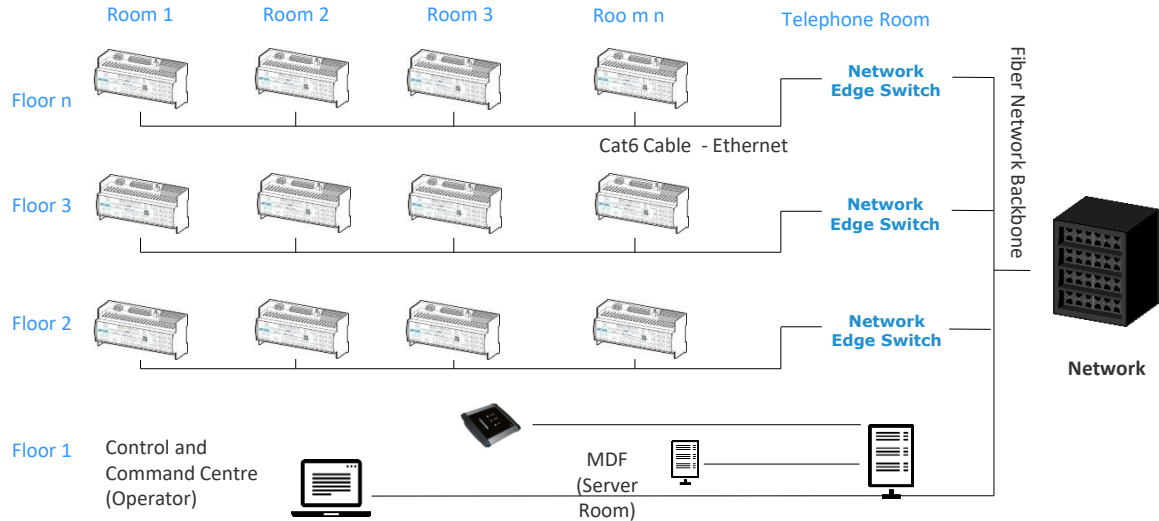
# Network infrastructure – IP @ room level

## RMS Server Room & Operator Control Centre

Client for Frontdesk, Housekeeping,  
Engineering, Security, Management



## System Overview – Online Network



- TCP/IP Connection at room level to ensure Real Time Communication
- Separate VLAN for RMS

# Door Lock Integration

*At Room Level*

- No single point of failure
- Advanced real time event exchange
- No additional wiring for door lock system
- Eliminate ZigBee mesh networks
- Most cost effective way to network door locks
- Enables mobile key technology



**1** Welcome scene without dedicated door contact



**2** Energy saving based on guest presence



**3** Workflows based on card-level detection

**Real Time Welcome Scene**

**Energy & Workflow Savings**

**Faster turn-around of Rooms**

# Smart Monitoring and Control





# Lock System meets Room Control

## Door Lock Integration

Using synergies, lower operational costs and increase guest experience

- No separate ZigBee antennas and networks
- No additional cabling
- Realtime data exchange

### Welcome Scene

Dialock door lock sends a signal when the guest enters – INTEREL controls lights, temperature and curtains.



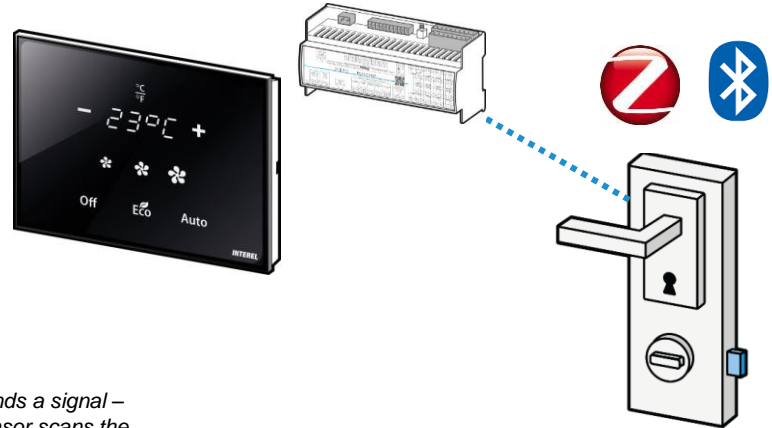
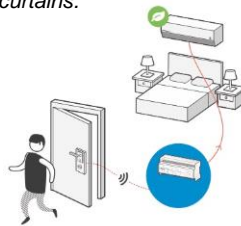
### Operational Efficiency

Dialock door lock reports who enters (guest or housekeeping staff) – INTEREL enables or disables functions accordingly.



### Energy Saving

Dialock door lock sends a signal – INTEREL motion sensor scans the room to validate guest presence and controls lights, temperature and curtains.



KABA®

SALTO

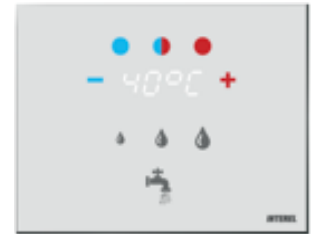
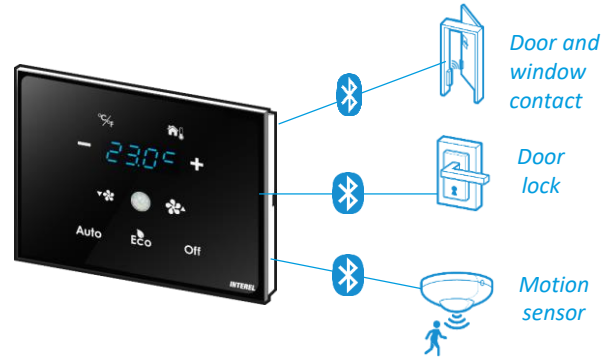
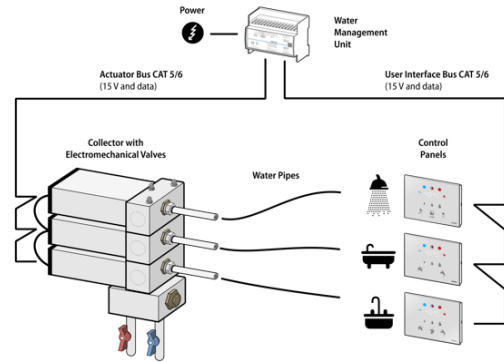
HÄFELE ASSA ABLOY

# Water Management meets Room Control

## Water and Energy Management Integration

Using synergies, lower operational costs and increase guest experience

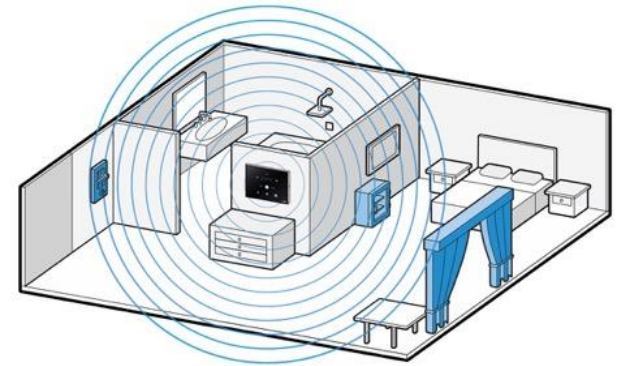
- One Central Control Systems - Water + Energy
- Intelligent Touch Panel Technology
- Integration with FCU , Door Lock
- Real-time data exchange
- Change temperature using pre sets
- Fine tune-up temperature
- Turn water on
- Scene for hand washing
- Turn water off



# Internet of Things Infrastructure

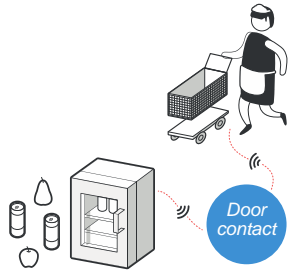
## Future-proofing hotels

SANKO devices are equipped with Bluetooth Low Energy antennas and create a property-wide wireless online network. Third party devices can be brought online, exchange their data and trigger actions on other connected systems.



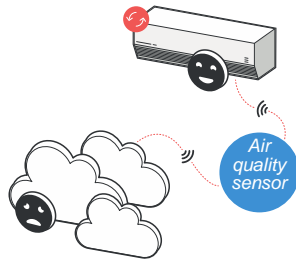
### Selective Minibar Refill

Minibar-door sends signal over Bluetooth - If the door was opened a refill request is sent to the staff



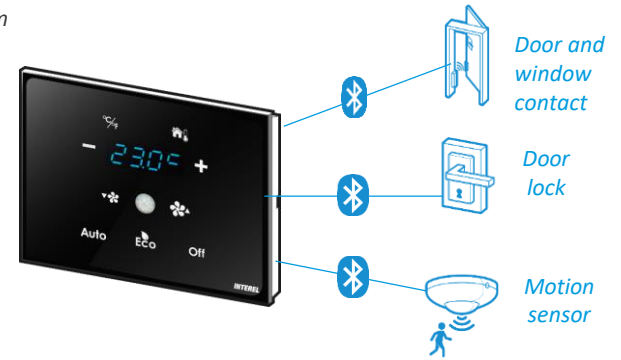
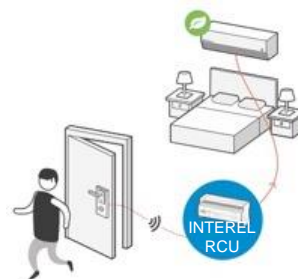
### Air Quality

Air quality sensor sends signal over Bluetooth - If the quality is low the air is being exchanged through the AirCon



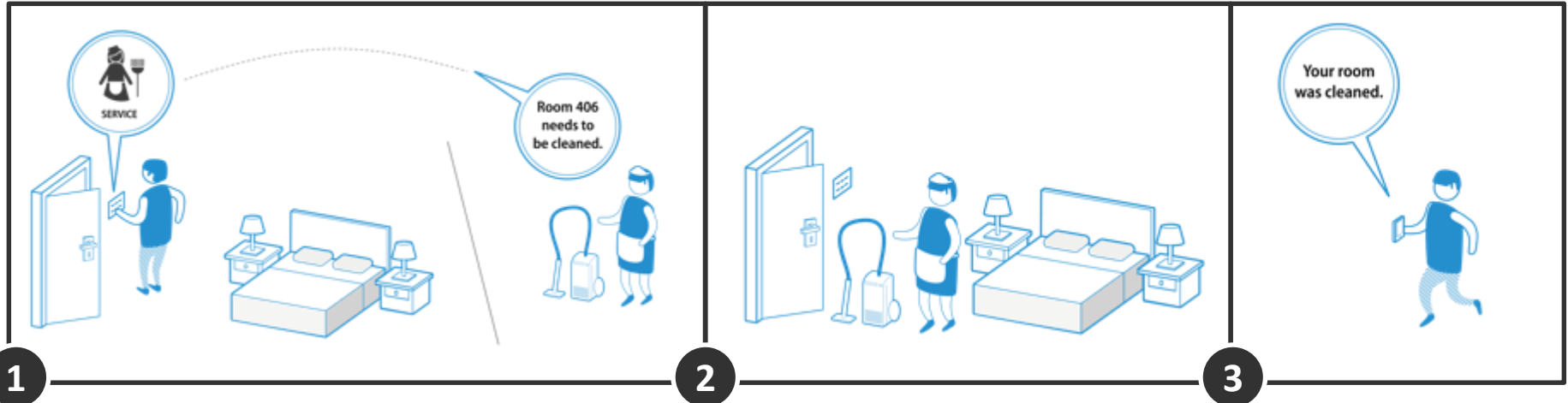
### Energy Saving

Multiple sensors detect presence of guest - If the guest leaves the room the energy saving mode starts



# Enhanced services for VIP guests – FCS / Hot SOS Integration

## “Express Cleaning Service”



1

*One guest leaves the room and requests the cleaning service for his room through the GRMS. Housekeeping staff gets immediately a notification of the request.*

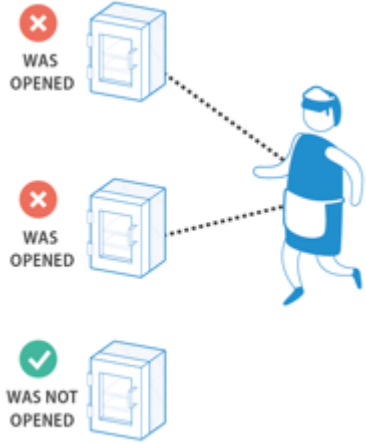
2

*Housekeeping can start cleaning immediately if guest is not present (smart presence detection through GRMS).*

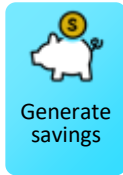
3

*The guest gets a notification on his phone as soon as the cleaning was completed.*

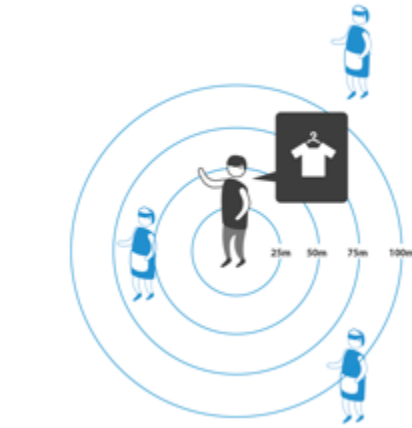
# Use cases



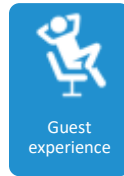
1. Selective minibar refill



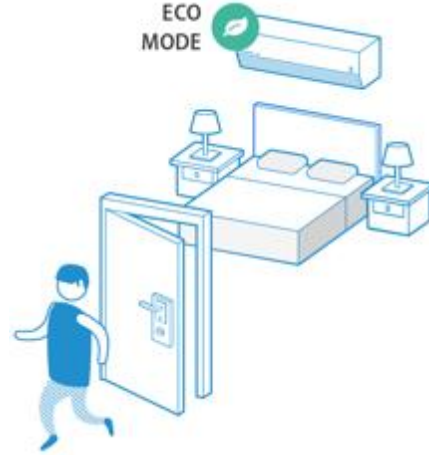
Generate savings



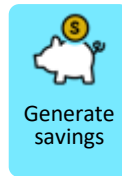
2. Dispatch service requests to the closest staff



Guest experience



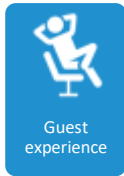
3. Automated Energy Saving



Generate savings



4. Air quality



Guest experience

# Use cases

