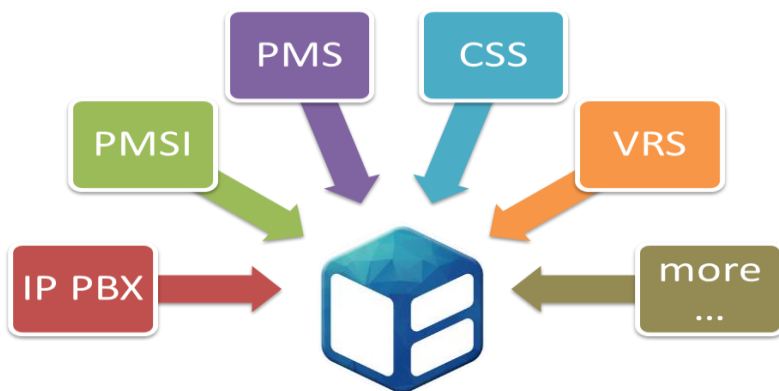


# 3CJ<sup>®</sup>

## OneBox



OneBox – Define One for All

## 2015.11

1	Intro.....	1
1.1	About Cetis .....	1
1.2	How OneBox Benefits .....	2
1.3	OneBox Topology .....	5
1.4	OneBox Structure .....	5
1.5	OneBox Cloud Deploy .....	7
1.6	OneBox Cloud Rental Plan.....	7
2	OneBox Features .....	8
2.1	OneEX (IP PBX).....	8
2.1.1	Technical Specification .....	8
2.1.2	Different Roles in Cloud Mode.....	10
2.2	PMSi (Property Management System interface) .....	10
2.3	VMS (Voice Mail System).....	13
2.4	VCS (Voice Confirmation System) .....	15
2.5	GSO (Guest Service Optimizer).....	16
2.6	One Attn (Operator Console).....	19
2.6.1	Functions .....	20
2.6.2	UI Design .....	1
3	OneBox Interface.....	2
3.1	Voice Mail ( VMS Interface ) .....	2

3.2	CDR ( CDR Interface ) .....	2
3.3	Property Management System ( PMS Interface ) .....	2
3.4	Telephony Control ( CTI Interface ) .....	2
4	OneBox Requirements.....	2
4.1	Hardware Requirement .....	2
4.2	Environment Standards .....	3
4.3	Power Supply.....	4
5	Trainings and After-sales Services.....	5
4.1	Training Course.....	5
4.2	Technical Service .....	6
6	Hotel Telephones.....	7
6.1	M Series .....	7
6.2	9600 Series.....	7
6.3	3300 Series.....	8

## **1 Intro.**

### 1.1 About Us

3C Technology is composed of a team of experts familiar with the hotel industry and technology application, the team has extensive experience in system design and deployment of many international hotel management group. At the same time, 3C is also a member of the Hotel Next Generation Technology Association (HTNG).

3C Technology develops and markets a full range of hotel application software in order to provide solutions to meet different business strategies and objectives of the hotel market. 3C team discuss with the hotel customer about each individual needs, and offers the tailored solutions to ensure that the customer needs are suitable for the perfect solution.

We will continue to lead the innovation of the next generation hotel applications. Our goal is to ensure that our solutions will continue to meet and exceed the customer' s expectations, and help them to increase their business revenue and reduce losses.

The 3CJ OneBox solution is mainly aimed at the hotel's communication and management requirements, by using the information technologies as VoIP technology, intelligent building, HD video communication, hotel assets

management, it provides the reliable service with integration solution, reaching the hotel All-In-One concept.

## 1.2 How OneBox Benefits

According to the hotel' s operation & management requirements, we aimed to a high degree of fusion, efficient professional hotel management system, help the hotel achieve the following operation and management objectives:

- reducing cost, saving human resources, improving the service efficiency, increasing income
- Integration with voice/data/mobile application, reaching the centralized management of hotel information
- Good Management with person/money/assets, total controlling of the hotel operating conditions
- Excellent process management, help hotel to carry out standardization and humanization management
- Continuous upgrading of products, to adapt to changes in the future hotel business.
- Personalized customization development, meeting the hotel' s unique demands.

3CJ OneBox consists of the following subsystems: SIP soft switching (IPPBX), hotel assets management system (PMSI), voice mail system (VMS), voice identification system (VCS), high speed internet access system (HSIA), the guest service optimization system (GSO), hotel engineering system (HES), content management system (CMS), intelligent room control system (RMS) and mobile terminal application system (App+) etc..

It is one of the most advanced organic combinations of IP communication and network technology, modern hotel management concept and service concept to provide a comprehensive communication solution with data, voice, and video and other hotel communication technology. It has the following characteristics:

➤ **Multi-functional communications**

Through this system, the hotel can realize the wired, wireless, voice, data, video and other communication function. Besides of the normal voice communication, it can also reach the network business interconnection including the room to room, room to LAN, room to meeting room, etc. .

➤ **Expandable platform**

OneBox as the hotel information data exchange hub, it seamlessly integrates with the communication subsystem and other business subsystem thus formatting a hotel application platform in a fully automated manner.

The interaction and communication between each subsystem are controlled and forwarded by OneBox, reaching the unified monitoring and management

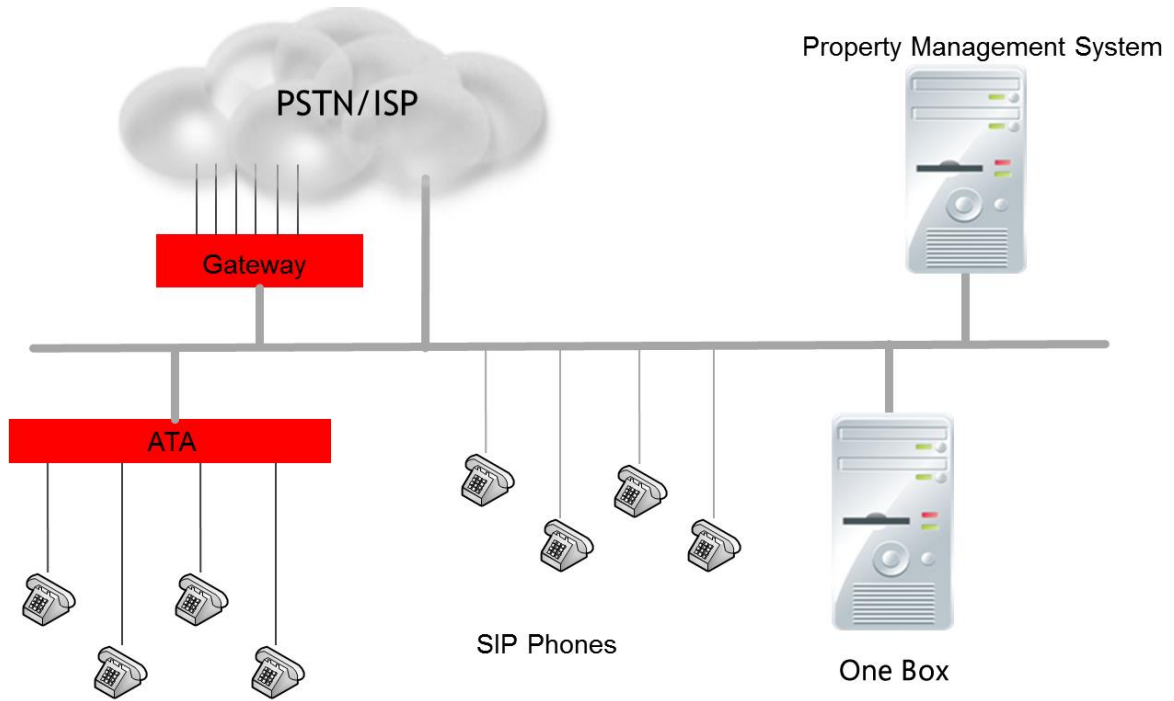
purposes. Through this system, it can respond to different communication needs of customers and fulfill a large number of applications. In addition to high-end hotel markets, the system also has a powerful extension of performance, including the VOD, conference call, advertising system of One Touch.

➤ **Rich Features**

3CJ OneBox offers a full range of functions, can easily achieve a variety of features for the hotel, and covers all the current business which a hotel information system must provide, such as the SIP console (One Attn), voice mail, telephone access control, mini bar, restaurant bill transfer and Automatic wake-up .

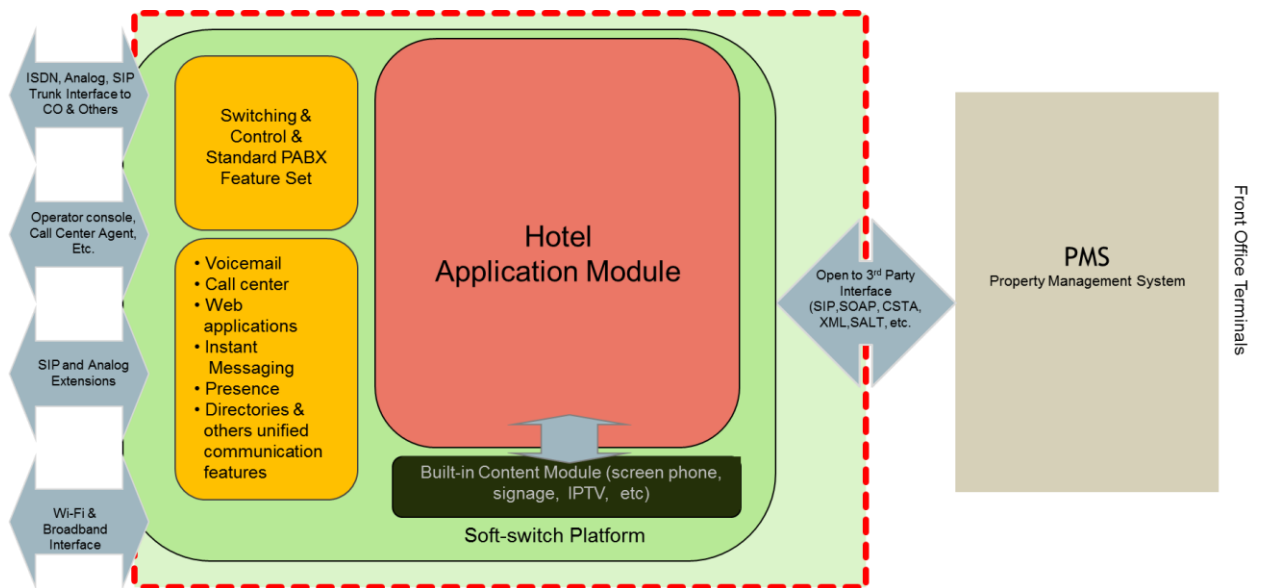
It offers hotels with more abundant business in response to the market's growing business needs. In addition, the system can support multi language making Guests feel at home.

### 1.3 OneBox Topology

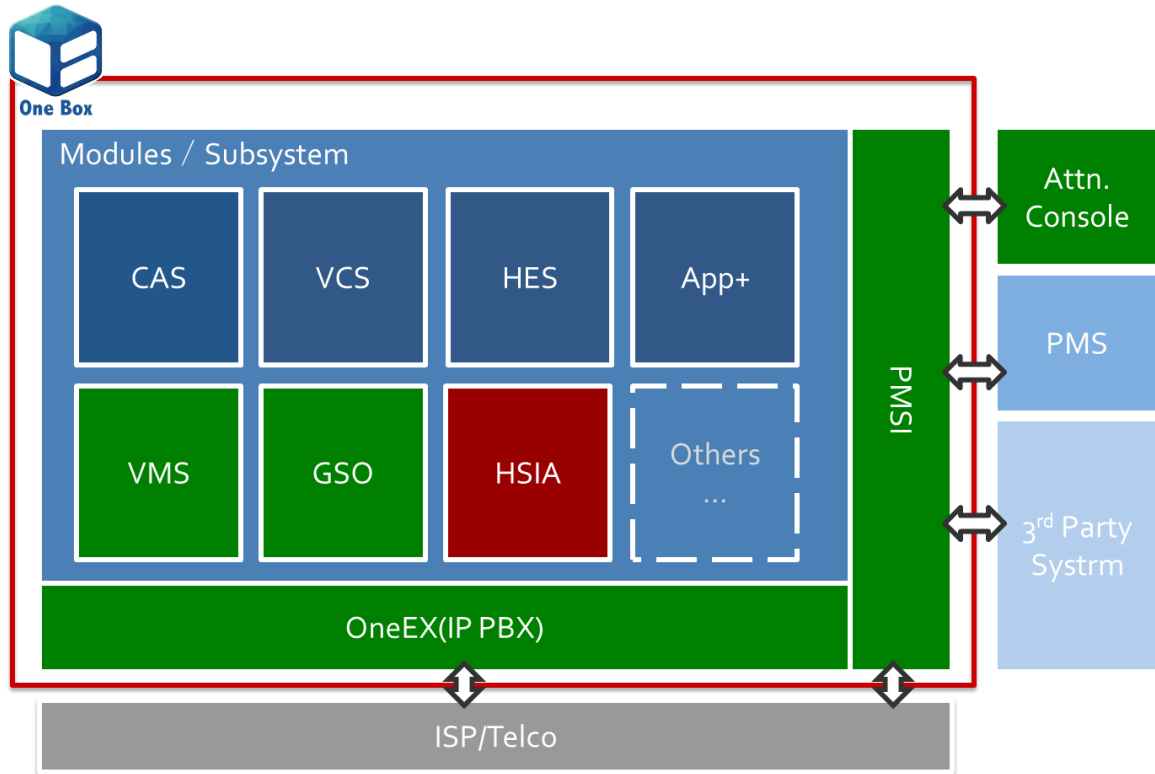


Analogue Phones

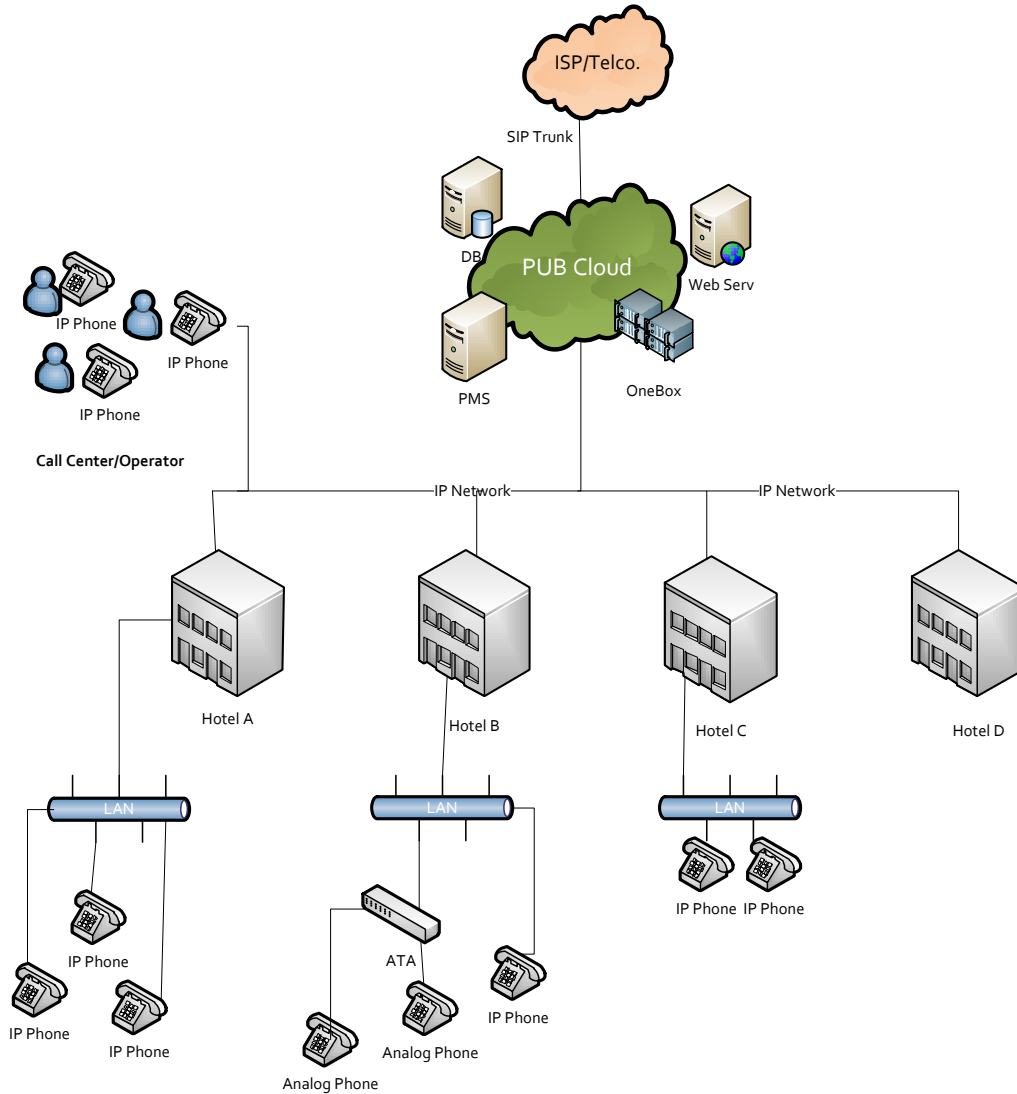
### 1.4 OneBox Structure







1.5 OneBox Cloud Deploy



1.6 OneBox Cloud Rental Plan

- High cost performance.
- Easy maintenance, saving manpower.
- Large coverage with VOIP access, every city can easily access.
- Low cost of SIP trunk rental.

- Cheaper call rates, no differences for Local / DDD calls.
- Prepay charge, pay as you go.

## 2 OneBox Features

### 2.1 OneEX (IP PBX)

OneBox provides SIP voice and video switching function. It also can integrate with the third party IP PBX to reach voice communication function.

OneBox supports various communication protocols, including SIP, H.323, IAX2 and Google Talk .It can be easily integrating with other open sourced PBX. At the same time, OneBox supports many advanced SIP features, such as presence/BLF/SLA, TCP TLS and sRTP. It can also be used as the transparent proxy such as the SBC (Session Border Controller) .

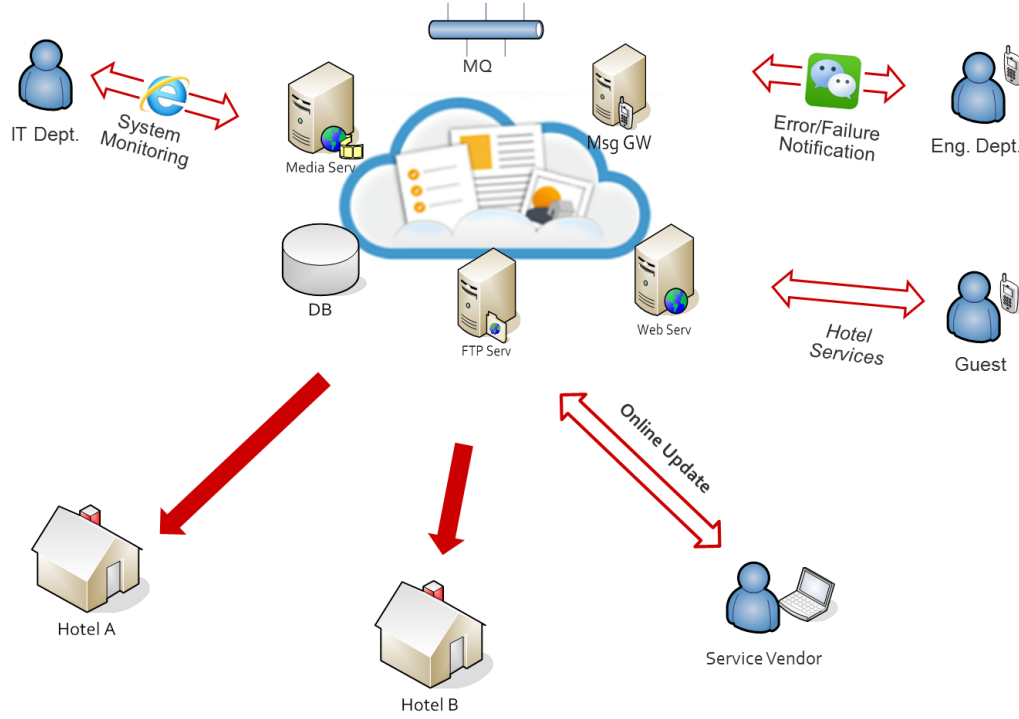
OneBox is flexible enough to provide routing and interconnect communication protocol for audio, video, text, or any other form of media. It can be deployed either on cloud or on premises.

#### 2.1.1 Technical Specification

Hardware	CPU 3.0GHz Quad Cores  /RAM 16GB/HDD 2*500GB/RAID 1
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Redundancy	support
BHCC when Busy	> =600000
Concurrency	> =400
SIP Extn Support	> =1024
Max. Trunk Num.	> =1000
Operator Num.	> =100
Remote side Num.	> =100
Max License Num.	> =9000
Conference Party Num.	> =3 party
Conference Room Num	> = 64
Soft Console Supported Num.	> =18000
IM Bus	Support
DND Station Num.	> =1024
CDR Buffer	> =51200
Extn Length	1-13 digits
Extn Name Length	> =27Chars
System Cascading	SIP Trunk
Multi-Tennent	Support
Voice Message Num.	> =1024
ACD Members	> =100

## 2.1.2 Different Roles in Cloud Mode



## 2.2 PMSi (Property Management System interface)

	FEATURES	DESCRIPTIONS
1	Bill to guest's bill	The hotel can realize different types of charges through the system (local, IDD, DDD, 800 free, artificial switching and INTERNET access).
2	Use the guest room telephone the mini bar consumption bookkeeping and room state updating:	The room attendant will be included in the mini bar consumption account system, and the room state are updated accordingly.

3	phone authority updates	During the check-in and check-out at reception, the system automatically update the guest room telephone' s authority .
4	Message Lamp	open and close the message lamp based on the new message left or not .
5	Guest name update	The operator can obtain guest name to accurate response to guest telephone.
6	Data exchange	Implementation between the Front system and PABX data synchronization.
7	Daily and monthly reports and comprehensive report	The night auditor and financial personnel get the repots based on extension and Sectorial, Classification and summary report, daily telephone report and mini bar consumption report.
8	No response timeout alarm	If there is any connection to the PMSI on the equipment failure, the system can be found in time, with sound and images alarm .
9	Data monitor	All data to PMSI and from PMSI, can be observed on the screen.
10	Mini bar list:	The detailed minibar list are stored in the system.

11	online data maintenance	When the PMSI operates in the background, users can call the system maintenance files to modify all the parameters (such as: system data printing, real state, language code , rate table, guest name, telephone additional fee, service fee, tax and manual switching costs etc.).
12	Dynamic log:	All transaction processing is stored in a file, for future reference.
13	ROOM STATUS UPDTAE	When transferring a guest room, the relative information is change aslo such as: voice mail, message, morning call.
14	Manual data input	Allow the user to manually input data to each interface system
15	Telephone bill printing:	Printing a phone bill, mini bar consumption account, print the previous bill and editor bill format.
16	Help screen:	Users can visit the help page for explanations all the functions of the system
17	Telephone fee calculation	When necessary, system can reedit the bill format, the hotel could master the charges calculation.
18	MULTI -INTERFACE	System can connect to many systems such as: front office

		system, PABX system, voice mail systems, voice recognition systems, fax mail system, maintenance system, service system and internal paging system.
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### 2.3 VMS (Voice Mail System)

When a guest check-in, voice mail system will automatically assigned a special voice mail for him/her, for the usage during their stay. This box provides private, confidential message environment for the guests. The guest can listen to the entire voice message through the room’ s phone when he is in. When the guest checks out, the guest voice mailbox will be automatically removed, and all non- answered voice messages will be transferred to the storage space temporary.

Voice mail system can support multiple languages, and the system can be set to guest’ s mother language to provide guests the “feel at home” service .

	FEATURES	DESCRIPTIONS
1	Personalized greeting	Guests can make a personalized greeting. When the phone is busy or no answer, the caller will hear this greeting.
2	Easy operation to record a message	Simple voice prompts. If the caller is the use of non touch telephone, the call be transferred to the hotel operator,



		or let your message.
3	Automatic control on the message light	When a new message left, VMS will open the message light on the room phone, and close the message light after listening to the message.
4	listen to messages in room	VMS will detect which rooms telephone is using the system, and play the voice message to guests. The operation without a password.
5	From distant places (hotels outside) to listen to messages	Guests can at any time to listen to the voice message, even if they are outside the hotel. In providing to listen to messages before the service, the operator should check the caller ID.
6	Pager messages	If you select this, whenever new message left, VMS will call guest' s pagers.
7	Operator assistance to listen to messages	If guest encounter s difficulties, they may choose to let the operator assistance to listen to the messages.
8	User can define message volume	The hotel can assign the total voice mail capacity for each guest and staff.
9	User can define message length	The hotel can set assign the message length for each guest and staff .
10	Record voice	This is the management and staff functions. With a

	memos	telephone recording a voice memo, then sent to multiple voice mail.
11	Forward message to another one	This is the management and staff functions. After listening to the voice message, the message is forwarded to one or more voice mailbox as required.

2.4 VCS (Voice Confirmation System)

OneBox VCS offers self-setting request through the room phone to, in order to improve the service level of the hotel. The system includes automatic wake-up, minibar billing and room state update functional modules.

Automatic wake-up subsystem (AWU) sets the wake up time through guest room telephone. Minibar gauge net system (MNB) is the hotel staff put to the guests mini bar consumption into the guest room phone bill through the room phone. The room state update system (RSU) is the hotel staff sends room state information to the management system through the guest room telephone, so as to realize the room state update. Since the VCS is operated through the voice prompting, so the error rate is very low.

<b>Auto Wakeup (AWU)</b>	<b>Minibar Billing (MNB)</b>	<b>Room Status Update(RSU)</b>
--------------------------	------------------------------	--------------------------------

Through the recording program , records standard sound prompt information (including date).	The hotel can encode all food and beverage consumption items.	The room attendant using the room telephone dial in to the system, to update the room state of the system
Guests can directly from their room to call the system, to set a wake-up time.	Hotel staff simply call into the system, type the project code and number. This excludes some artificial calculation error.	The room attendant choose a predefined room status
The system will play the set wake-up time, and suggested the guest to confirm.	The system will use the voice prompt to remind the staff of their input, to ensure the accuracy of input information.	Once the room state is selected, the system will remind housekeeper with voice prompt, to ensure the accuracy of input information.
The system call the guest room phone. If the guests do not respond, the system will notify the operator.	Finally, the mini bar consumption items delivered to guest folio in system.	The new status will be transmitted to the front desk system
After guest departure, the settings will be automatically cancelled.	-	-
Guests can request the second wake-up service in 10 minutes (after a nap wake)	-	-

## 2.5 GSO (Guest Service Optimizer)

OneBox GSO is based on one-stop service center with a set of optimized and simplified system, it is suitable for guest service dispatching and monitoring. GSO has abandoned the original one stop service center with many complex functions, refining the core task distribution, task control, task report and other basic functions, make the system more independent, more simple for operation.

GSO features and functions :

- Supports multiple user rights management
- supports multi language interface, language switch at any time, support multi language input
- Support distribution and management of internal service request task within the hotel staff to support customer service at the same time
- support guest information query, such as name/ languages /VIP grade, check-in / check-out time
- support to establish service task by the Department and the standard setting for completion time
- support the distribution of multiple service task to different service personnel for the same customers with different demand
- support to reassign the distributed service task
- support to send the service task to individual or group personnel
- support handling the customers service request and complaints respectively
- Support setting the login and logout which is on duty or not .
- Support the real-time tracking query on all expediting service tasks and display the task status in different color
- support tracking the missed calls. Guests would be called back through the integration of voice mail at the customer service center when all staff were busy
- support all service upgrading, delaying , completion status is displayed by the

screen prompt in order reminding the personnel to take corresponding measures, such as telephone conformation when the task is completed

- support multi reply once task was finished such as text message reply
- support customized service task format
- service center support the wake up , DND, phone authority update .etc
- support establish a nested service task when a task is completed to assigned another task automatically
- support automatic escalation to senior management when a task did not complete in the defined time .
- support extended completion time in special circumstances
- support prefabricated timing transmission of all service tasks in its period.
- support task specific supervision module when distributing a certain tasks, the task is sent to the supervisor at the same time
- support intelligent tasks distribution which selects the most appropriate service personnel automatically according to the personnel location and time
- support fuzzy query according to the service code, keyword, service and task distribution frequency
- supported the login and logout by the service personnel' s handheld terminals ,which shows on duty or not .
- support the automatic task distribution according to guest information such as the VIP Code/Special Code to inform the staff the guest luggage number,

guest information update, room switch etc .

- support the prefabricated custom information template for group task or notification information release
- support the integration of IP telephone system to provide the guest self-help service
- support real-time query and distributed service task in mobile devices
- support the 3rd party message interface
- Support the room control system interface such as the room cleaning, do not disturb, door open, t timeout events
- support engineering module and HES project management system

## 2.6 One Attn (Operator Console)

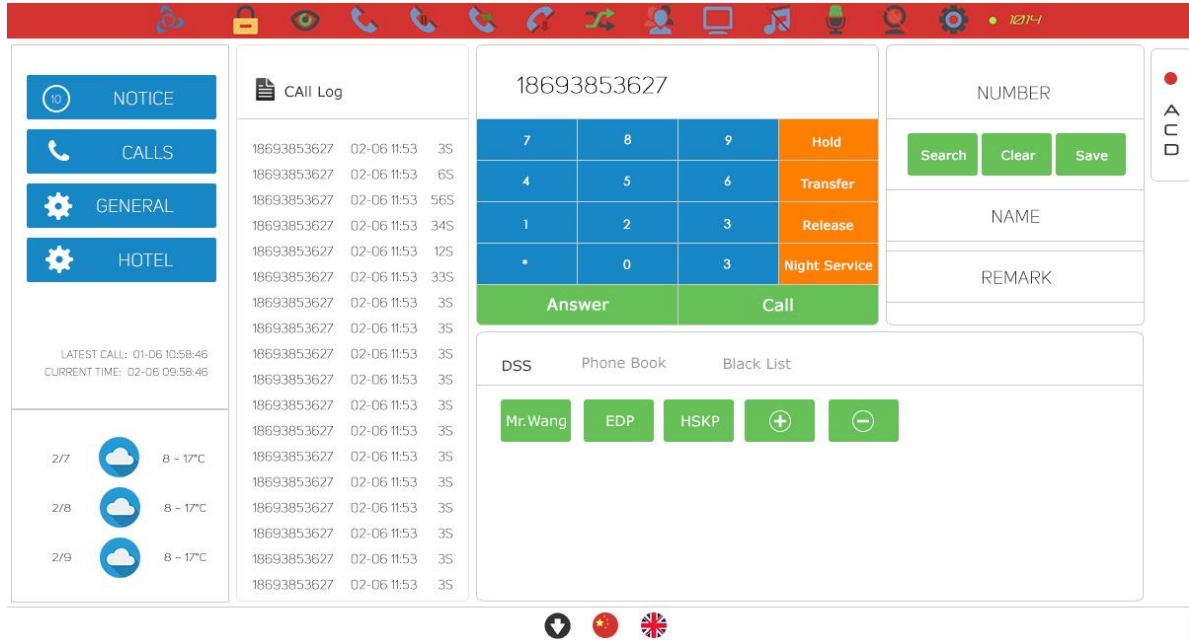
One Attn is the front core end of the OneBox system, is the entrance of all business access. Through highly integrated One Attn, it can not only can complete the attendant daily call answering, forwarding, three party call function; it can achieve the functions on business level, such as wake up , task dispatch, DND setting, team management functions.

One Attn is designed on the B/S architecture, the user can share the one stop service without installing the application software whenever and wherever possible. By open the browser administrators can easily access and management of OneBox system. In addition, One Attn provides advanced audio and video call services, video quality up to 720P.

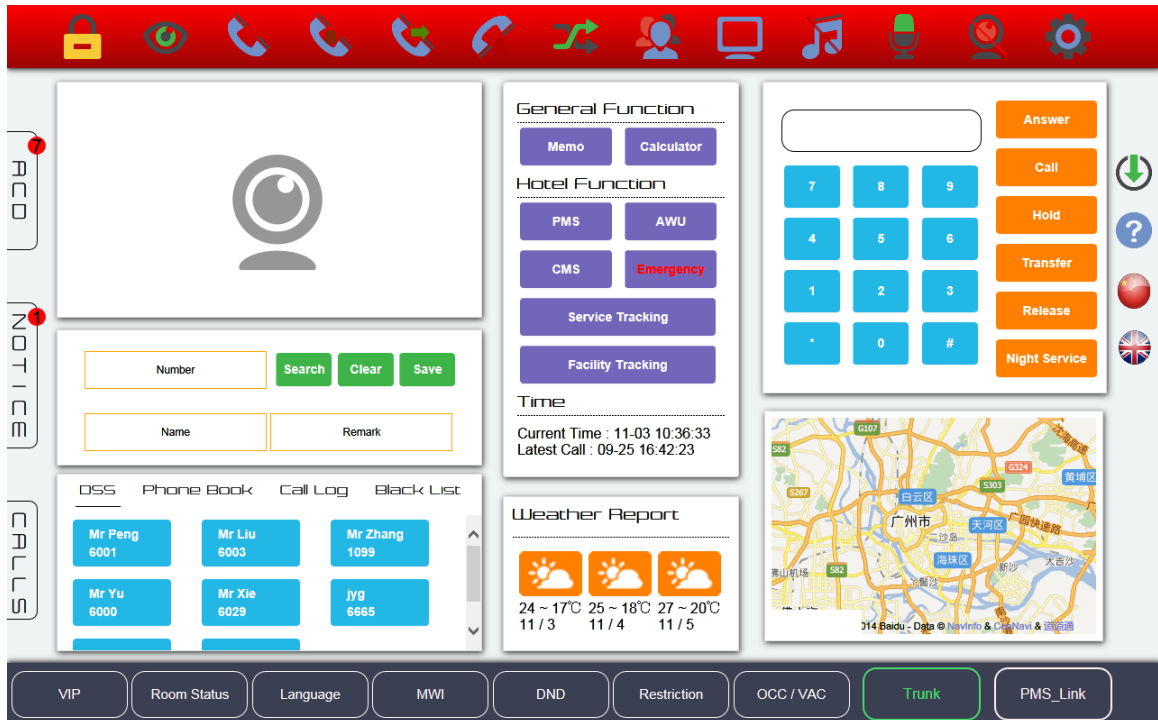
## 2.6.1 Functions

<b>Telephony Functions</b>	<b>Hotel Functions</b>	<b>Other Functions</b>
➤ H.D Video Call	➤ Guest Info Modify	➤ Weather Forecast
➤ A-number	➤ Phone Authority Control	➤ Map Service
➤ Busy/Free mode	➤ DND	➤ Notice Board
➤ 3 party conference	➤ Text Message	➤ Knowledge based
➤ Call monitoring	➤ Wake Up Call	➤ Memo
➤ Mute	➤ Message Lamp Control	➤ Calculator
➤ Call Recording	➤ One Stop Service Center	
➤ Hold/ Unhold	➤ Housekeeping Service	
➤ Call Answer	Module	
➤ Call forward	➤ Engineering Module	
➤ Make Call /Hang up	➤ Room control module	
➤ Phone book / Black list		
➤ Call History / DDS		
➤ Dial / Shortcut mapping		
➤ Call Queue(ACD)		
➤ IVR		
➤ Instant Message		

2.6.2 UI Design



One Attn Express



One Attn Premium



### **3 OneBox Interface**

#### 3.1 Voice Mail ( VMS Interface )

OneBox provide multi-language Voice Mail Services, Minibar Charge Posting and Room Status Update.

#### 3.2 CDR ( CDR Interface )

OneBox support outputting multiple formats of Call Detail Records (CDR).

#### 3.3 Property Management System ( PMS Interface )

OneBox support interfacing with hotel management system, such as Micros Opera/HIS/HMS etc.

#### 3.4 Telephony Control ( CTI Interface )

OneBox also providing a powerful CTI interface, by integrating this function, developers can easily build up their own call center system or operator applications.

### **4 OneBox Requirements**

#### 4.1 Hardware Requirement

PC : IBM System x3650 M4 Server

OS : Windows Server 2008

DB : MySQL Server 5.5 or above

Environment : .Net Framework 4.0 + IE 11

## 4.2 Environment Standards

- Precision equipment such as server, disk subsystem, hub and router should be in plane sealing, special interval in temperature and humidity control environment (i.e. computer room).

- The host room' s temperature and relative humidity requirements are as follows

	OPERATING	OFF DUTY
temperature	16 °C - 28 °C	10 °C - 43 °C
humidity	8%-80%	8%-80%

- Terminals, printers can be configured in the operating room or workroom.  
Temperature can refer to the computer room temperature.
- The host room floor should be with elevated anti-static floor, in order to facilitate the wiring and maintenance of cleaning, no laying carpet.
- The host room' s ceiling should use of asbestos or glass fiber fireproof material, prohibit the use of gypsum board, bagasse board, to prevent dust and pollution equipment.
- Host room' s inner wall suggests posting on complexion wall or with non-powder cement paint.
- If humidity is bigger, we suggest to place a damp extraction machine in the room

#### 4.3 Power Supply

- 1 The computer equipment power supply shall be directly from the building switchboard (independent line power supply), not sharing with the moving power, lighting equipment, photocopiers and other office machines.
- 2 Using (UPS) in order to avoid the data loss or damage of equipment from outage.
- 3 The computer room lighting / power (including air / dust / dehumidification machine) can not be controlled by main power switch electric equipment
- 4 The computer general cable lines should be equipped with air protection switch and no fuse switch, to prevent the instant fault damaged computer equipment
- 5 The distribution box should be set in to the host room.
- 6 power supply equipment needs independent earth wire, requirements are as follows:  
  
    Grounding voltage: ground of neutral line voltage should be less than 0.5 volts;  
  
    grounding resistance less than 5 ohm.

## 5 Trainings and After-sales Services

### 4.1 Training Course

We attach great importance to after-sales services by providing comprehensive and effective training. Our training courses highlight the business as the main line, focus on how to use the computer to handle the daily business, emphasize on the employees actual operation abilities, make the staff can immediately master operation after training.

Training courses include:

- Application training
  - ◆ Target people : Staff who using the OneBox system
  - ◆ The application of training including computer based training and combined with our OneBox function operation training. After training, the staff can master the method of system operation, understanding the functions of the system and connection.
- Management training
- Technical training
  - ◆ Target people : computer user

- ◆ Daily maintenance of the computer department that let technical personnel can carry out system.

## 4.2 Technical Service

- Question and consulting service

When the users meet a problem during in the software installation, use, maintenance and other aspects, they can contact technical support center by telephone, fax, mail, e-mail and technical support center, will be satisfied with the answer.

- Remote connection service

Remote maintenance via internet in real time to solve customer problems.

### Onsite Service

The technical support center will allocate support consultant nearby, to provide onsite support in the shortest time to customers for the reported s urgent software faults .

- Service Standards

In the warranty period, we commit the user with below service response and handling time:

- 7 \*24 \*365 support hotline

- The technical support center respond within 1 hour after receipt of customer service requirements reported.
- If we can not solve the issues by remote maintenance, under the traffic conditions, technical engineer will arrive at customer site in 24 hours

## 6 Hotel Telephones

### 6.1 M Series

<http://www.cetisgroup.com/m-series.html>



### 6.2 9600 Series

<http://www.cetisgroup.com/model-guide-telematrix.html>



6.3 3300 Series

<http://www.cetisgroup.com/model-guide-telematrix.html>

