

## Mobile Guest Softphone HOSPITALITY APPLICATIONS



Smartphones have become nearly ubiquitous, with people using them at work, home and on the move to interact with their environment and stay connected. These devices give users the freedom to access information of their choice, services and applications at any time or in any location.

Hotels can take advantage of these connected devices to offer guests a better way to interact with their services and facilities inside and outside the hotel.

The Alcatel-Lucent **Mobile Guest Softphone** turns a guest's own mobile device into an extension of their in-room phone. The guest downloads the free application from popular online app stores, and then uses the app to scan a QR code. This auto-configures the app on the guest device based on credentials input by the hotel reception desk, via an easy-to-use web interface. The soft phone requires no specific IT infrastructure (no configuration or PBX provisioning), and because the wireless LAN is used to access the service, calls within the hotel network are free of charge, and all outgoing calls are added to the room bill.

### Hotel benefits

- Always available for your guest not only within the hotel but also outside the hotel
- Create upsell opportunities via easy access to hotel services
- Increase revenues and allow guests to control their communications costs:
  - Encourage them to use the hotel telephony services on their devices, versus more expensive mobile operator roaming services
  - Allow them to call hotel services from mobile devices for free inside the hotel
- Reach guests anywhere inside or outside the hotel, with no need of guest private numbers
- Offer enterprise grade VoIP quality, based on Alcatel-Lucent Enterprise's industry proven communication platforms
- No extra IT administration for hotel, guest's device association to the guest's room is automated and dynamic

### Guest benefits

- Enhance guest experience and satisfaction by enabling their own device use
- Guests can reach all hotel services from anywhere in the hotel within the wifi coverage or outside the hotel.
- Guest can easily reach his favorites contacts through the hotel private directory.
- Guest-friendly and easy to use application: hotel directory, private directory

### Customer testimonials

*« We've done a substantial savings. In our case - 192 rooms - cabling in the rooms is not necessary. The cost of the app is far less than the cost of the physical phones and cabling. »*

**ANDERS JUNGER, CEO, WINN HOTEL GROUP, Sweden**

## Features

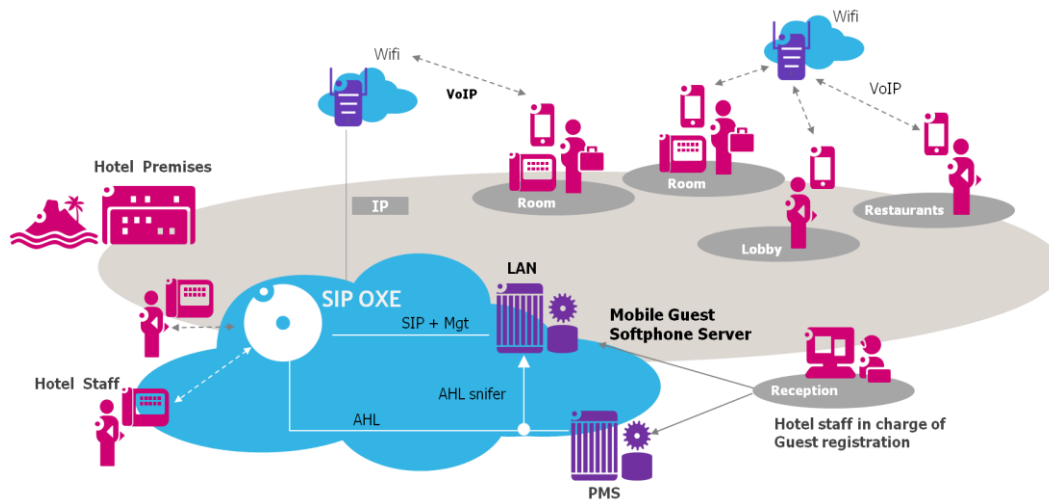
- Simple QR code scan for automatic configuration and guestroom association: guest devices automatically become part of the hotel telephony system (with no provisioning necessary) and are associated to the respective guest room
- Bring-your-own-device (BYOD) enablement for guests, allowing them free voice communications via their smartphones while inside the hotel wireless network. Calls to the outside of the hotel will be charged at the hotel rate and added to the room bill
- Speed dials for the hotel service directory available inside and outside the hotel: embedded hotel directory for easy contact with the different hotel services via speed dial numbers
- Dial pad and click-to-call from the Mobile Guest Softphone application: a simple dial pad to enter direct numbers
- A private directory for hotel guests for their favorite contacts within the hotel
- Centralized management via a web administration interface
- Inbound and outbound communication with identification of the calling or called party
- Multiple mobile devices can be associated to a room
  - Dynamic allocation depending on room occupation (one or several guest smart devices)
  - Automatic provisioning of the guests devices in the hotel suite configuration in the OmniPCX Enterprise
- WYSIWYG web administration interface and easy customization to match the hotel identity chart (colors, background, images,...) and numbering plan (speed dial keys and corresponding numbers)
- The Mobile Guest Softphone application can be made available under the hotel brand on AppStore and Google Play platforms by the Alcatel-Lucent Enterprise (ALE) Professional Services
- Mobile Guest Softphone SDK Toolkit (APIs), for those preferring to integrate inside e-Concierge Apps:
  - SDK toolkit option to enable telephony services for existing eConcierge applications
  - The Mobile Guest Softphone framework SDK provides a library of multimedia-over-IP (MMOIP) services for ALE Partners to enable telephony services inside existing eConcierge solutions
  - The Mobile Guest Softphone framework SDK also provides a REST management API for Mobile Guest user management and server side integration
  - The SDK is available through the ALE Application Partner Program (AAPP)

*Example of an integration with an eConcierge application*



## Architecture

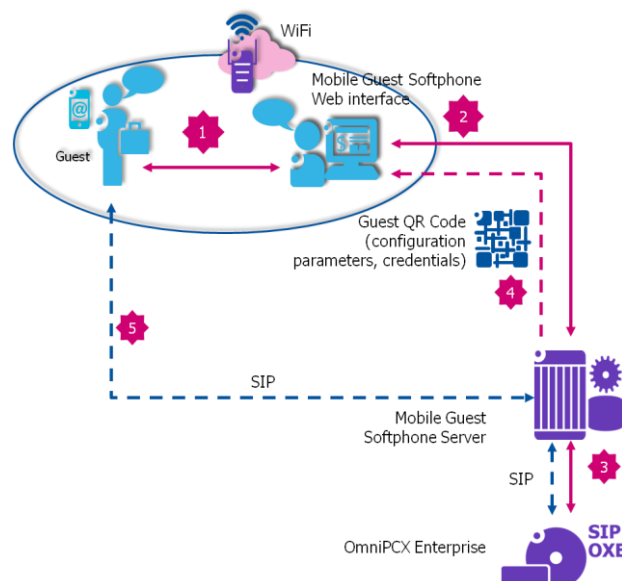
### High level architecture



*See pre-requisites section below*

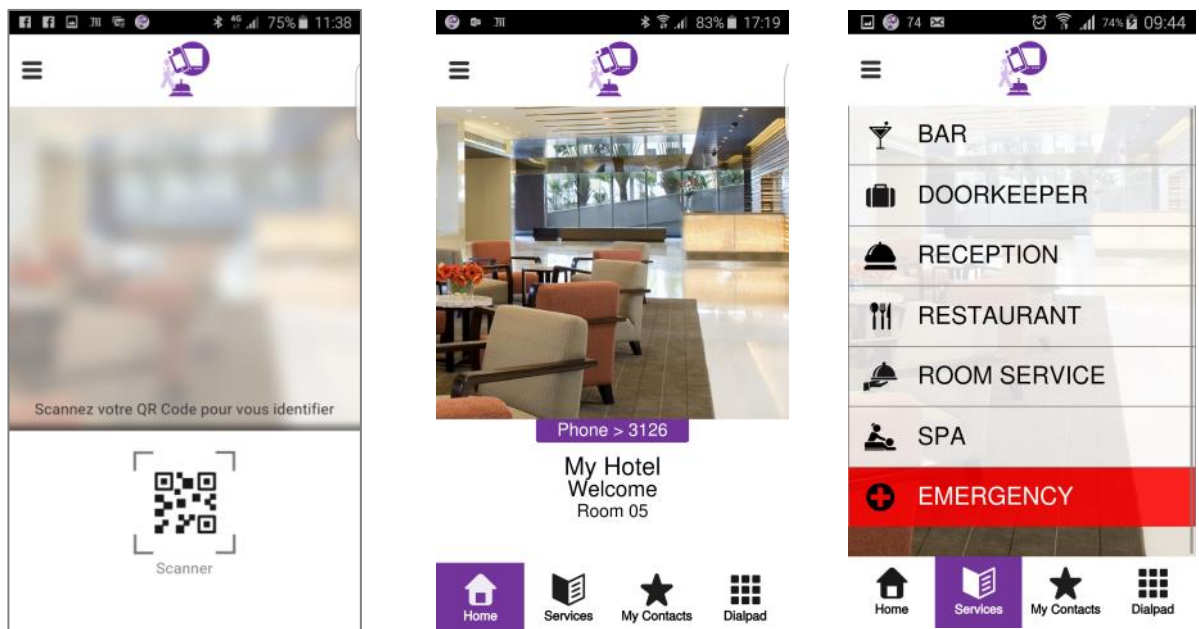
### How it works

- **Guest check-in**
  - The guest checks in at the Reception desk, via the standard PMS (property management system) process
  - The guest check-in information is used to provision the Mobile Guest Softphone user account
    - Telephony resources are automatically managed on the OmniPCX Enterprise (Zero-IT)
    - A guest QR code is dynamically created on the Mobile Guest Softphone web management interface
    - The QR code carries settings and credentials information for the Mobile Guest Softphone application automatic configuration
    - The QR code is made available through the Mobile Guest Softphone Server web management interface and can be printed



- **Mobile device pairing to the guest room**

- The guest connects to the hotel wireless network
  - Once connected to the hotel wireless network, the guest should access the internet to download the Mobile Guest Softphone application from the relevant application store (App Store or Google Play), if not already done prior arrival.
- The guest simply scans the QR code to pair their smart device with the allocated guest room
  - The app embeds a QR code scanner, requiring no specific settings changes by guests
- After the QR code scan, the guest can enjoy the application
  - The smart phone becomes part of the room devices and is paired with the room automatically: when the room is called, all devices are alerted including the Mobile Guest Softphone app on the guest device
  - The hotel directory is set up with the proper hotel services phone numbers
  - When a call is placed to an internal number via the Mobile Guest Softphone, the room number is presented



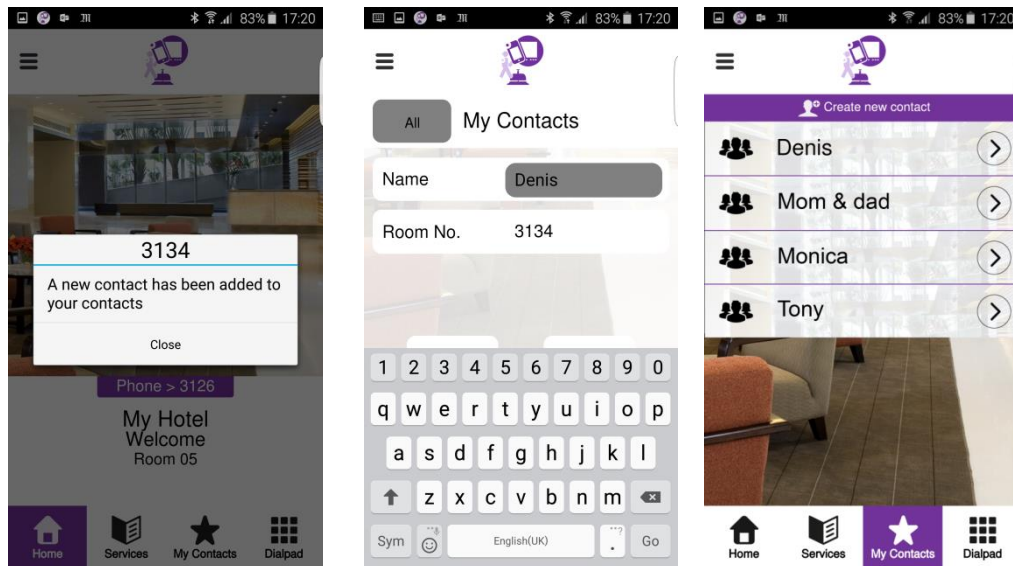
- **Post-pairing**

- The application receives a configuration from the Mobile Guest Softphone Server based on the QR code generated for the guest
  - Banner, picture, color scheme
  - Speed dial labels and associated numbers
  - IP parameters
  - The web management interface is used to handle the parameters
- The guest can use speed dials, enter a phone number or be called via their room extension number or room DID (direct inward dial) number

- **My Contacts**

Hotel guests can have a private directory for their favorite contacts within the hotel, under the **My Contacts** tab, where they access a list of previously added contacts.

Guests sharing the same room will have their numbers automatically added to each other's favorites list as soon as they log into the application.



- **Outside the hotel**

The guest can benefit from the Mobile Guest Softphone features outside the hotel.

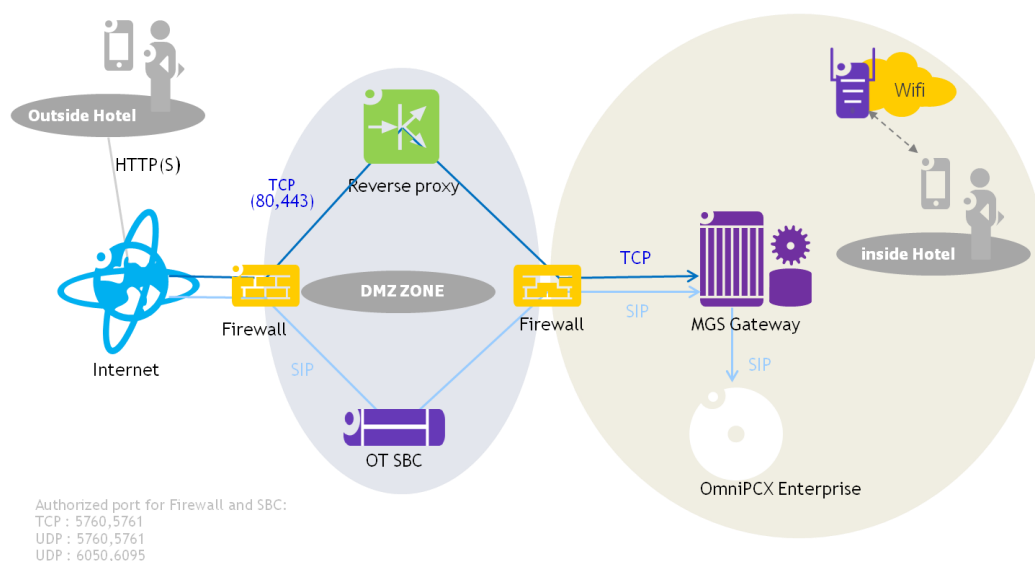
- **With no specific infrastructure**

The guest can access the hotel service directory speed dials outside the hotel through the GSM network. The calls will be charged according to the mobile operator costs.

In this configuration, the hotels cannot call guests via their Mobile Guest Softphone

- **With an ALE OpenTouch Session Border Controller (OT SBC)**

The guest can benefit from all the Mobile Guest Softphone features inside and outside the hotels. Hotels can reach guests even if they are outside the hotel WiFi coverage.



The ALE OpenTouch Session Border Controller (OT SBC) is used to manage the SIP session of the remote Mobile Guest Softphone clients and of the IP address translation between the public network Internet and private network corporate. It is a security element acting as a VoIP firewall. OT SBC is in charge of managing and securing the SIP session and the media streams (audio) based on RTP or SRTP (encrypted media streams).

The Reverse Proxy (RP) in charge of managing the HTTPs session to access the telephony services provided by the software clients on the smart phone based on web services. The Reverse Proxy acts as a **web applicative gateway** between remote Mobile Guest Softphone clients and the Mobile Guest Softphone gateway. The Reverse Proxy is a 3<sup>rd</sup> party product that is not provided by ALE.

The ALE OpenTouch Session Border Controller and The Reverse Proxy have to be together in the DMZ of the hotel network allow implementing the use cases for remote guest access to Mobile Guest Softphone services.

- The Mobile Guest Softphone web management interface:

- All parameters are centrally managed through the Mobile Guest Softphone web management interface
- Mobile Guest Softphone accounts management :

Room number	Last name	First name	Number of device
109	Smith	John	0
2	Laji	Safae	3
3	Gahi	Youssef	5
4	room4		3
5	Boudraa	Karim	0

*Guest list accounts page*

*Guest account details, QR Code display and printing option*



- Mobile Guest Softphone app centralized settings management :

Guest profiles **Application** Administration Documentation admin Logout

Speed dials

Speed dials

Authentication  
Languages  
Settings

Add new speed dial

Show 10 entries Search:

Name	Extension	DID Number	Number Type	Preview
BAR	2003	0298285109	SPEED_DIAL	BAR
DOORKEEPER	3005	3005	SPEED_DIAL	DOORKEEPER
EMERGENCY	3006	3006	EMERGENCY	EMERGENCY
RECEPTION	3006	3006	SPEED_DIAL	RECEPTION

*Speed dials definition page*

Please choose :

A logo  
Search

A background  
Search

A head  
Aucun fichier choisi

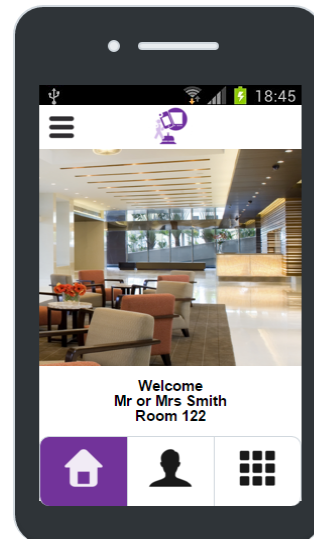
# ffffff

A header text color  
# 000000

A theme  
light

A theme color  
# 72339a

Save



*Mobile application settings definition page (logo, background image, header message, and color theme)*

**Dialing Help**

This page allows administrator to specify in multiple language the tool tip help that will be display to mobile application user.

Languages ☒ en ☒ fr ☒ sv

en fr sv

Please enter the help text for dialing

International call: 0 + 00 + Number  
National call: 0 + Number  
Chamber call: # + Room number

*Dialing rules help management*

- Mobile Guest Softphone Hotel Staff user profile and login management :
  - The Mobile Guest Softphone web management interface provide user login interface and role management (Admin, Staff, IT), according to the profile the user gets access to a level of management.

*The Mobile Guest Softphone web management interface: Hotel staff account management page*

## Authentication

Add a new authentication

Show 10 entries

Search:

Username	Role	Email Address
hotelAdmin	ADMIN	test@test.fr
hotelStaff	STAFF	test@test.fr



## Prerequisites

The minimum requirements to support 300 declared Mobile Guest Softphone devices are detailed below for indication only. Please refer to the “*Mobile Guest Softphone Prerequisites*” document posted on the [Enterprise Business Portal](#) for the official prerequisites.

- **OmniPCX Enterprise** up and running in hotel configuration with the required licenses:
  - Hotel Suite licenses
  - Hotel Room configuration in “Multi occupancy mode”
  - “SIP Extension” license 3BA09A80JA (one per registered guest mobile device)
- **Mobile Guest Softphone server** (physical or virtualized) up and running:
  - RedHat OS (64bits)
  - i5 processor or equivalent
  - 4 GB RAM
  - 100 GB hard disk
- **Wireless and LAN networks ready for VoIP:** the hotel should provide a wireless network ready for VoIP communication as prerequisite of the Mobile Guest Softphone solution implementation
  - WLAN should connect to the OmniPCX Enterprise LAN network
  - Wireless coverage in the entire hotel
  - Wireless network authorizing HTTP/HTTPS, SIP and RTP exchanges with the OXE LAN
  - Wireless network authorizing SIP and RTP exchanges between wireless network equipments
  - “SSID isolation” not activated on the guest WLAN
  - WLAN shall authorizing SIP and RTP exchanges between WLAN equipments. Direct RTP communication is used between devices
  - No Network Translation Address (NAT) between LAN and Guest WLAN
  - A Domain Name Server (DNS) present on the network infrastructure, including the OXE and MGS Servers hostnames

If the hotel network can’t answer the requirements listed above, an OT SBC and Reverse Proxy will be necessary, even if inside the hotel, to allow the SIP and RTP exchanges between wireless network equipments
- **ALE Open Touch Session Border Controller:**
  - Number of Remote SIP users registered: it is the number of remote SIP clients connected to the communication server through the OT SBC, corresponding to the number of MGS users
  - Number of simultaneous SIP calls: a call is a SIP signaling session crossing and managed by the SBC. It is used to establish a conversation based on audio only
  - Number of SRTP-RTP Session: identical to the number of simultaneous SIP calls
- **Reverse Proxy :**
  - The Reverse Proxy vendor should be part of the AAPP. It is the case of BlueCoat and NGINX vendors
  - The Reverse Proxy could be eventually from another vendor but the technical pre-requisites provided by ALE must be applied on the given product (refer to the dedicated Application Note) and the end-to-end configuration is under the responsibility of the Business Partner
- **Smartphone supported platforms** (please refer to the compatibility matrix for the OS release):
  - iOS
  - Android

For more details about the Mobile Guest Softphone requirements, please refer to the “*Mobile\_Guest\_Softphone\_Prerequisites*” document in annex of the commercial quotation and available on the Enterprise Business Portal.

## Quotation and Ordering

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- For a quotation, please contact the ALE Professional Services [professional.services@al-enterprise.com](mailto:professional.services@al-enterprise.com) to get a quotation for the application.
- A Specific Application Support (SAS) contract is mandatory the first year. The SAS contract includes vital remote maintenance and support. A multi-year option is also available, with the 3 or 5 years multi-year options granting additional discounts.

## Contact us

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- For more information about this solution, please contact your local Channel Manager or Service Business Developer
- More information are available on the Business Portal: <https://businessportal2.alcatel-lucent.com>

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