

Alcatel-Lucent OmniPCX *Enterprise* Communication Server

Hospitality



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Notice

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This document introduces the Alcatel-Lucent OmniPCX Enterprise Communication Server, its products and features. All documents associated to this introduction cover most of the aspects for designing offers based on current manufacturers and business partner agreements. They include introductory explanations to position the offer in relation to client needs. References to in-depth documentation are indicated to direct you to product descriptions or product sites.

Who Should Use this Document?

As an introductory offer, this document can be used by Alcatel-Lucent vendors, clients, partners and associates involved with the implementation of Alcatel-Lucent PCX systems.

Terms and Abbreviations Used in this Document

Terms and abbreviations specific to each subject may be noted in individual glossaries.

A general overview document is available in this documentation set.

Changes Summary

The Standard Offer document set is based on a specified release and each document can contain a "What's new?" chapter to indicate product modifications associated with the release.

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1 Overview

The OmniPCX Enterprise Communication Server hospitality software is an integrated application providing a consistent group of features designed to address the following needs:

- Handling guest arrivals and departures
- Handling group arrivals and departures
- Management of wake-up calls
- Management of guest voice messages
- Dynamic suites configurations (in guest-based configuration)
- Billing of calls from rooms
- Real-time tracking of guest telephone credit (deposit)
- Verification and tracking of room status
- Management of room service
- Management of waiting messages

The OmniPCX Enterprise Communication Server hospitality software can also work in association with a hospitality property management system (PMS) with the Alcatel-Lucent hospitality link (AHL) to satisfy the following needs:

- Dialing plans adaptable to the hotel configuration, such as matching phone numbers to room numbers.
- Different and separate outgoing trunk groups for the room phones and the administration phones.

1.1 Alcatel-Lucent Hospital Link

The AHL computer link is used to access the OmniPCX Enterprise Communication Server, for hotel/hospital features only, from an external PMS computer. The AHL link enables the front office computer to incorporate telephone features in hotel/hospital management. The AHL link works on V.24 or TCP/IP Ethernet lines.

The complete AHL protocol is only available to developers who have a partnership contract with Alcatel-Lucent.

2 Guest Services

2.1 Direct Outward Dialing (DOD)

Direct outward dialing (DOD) provides direct dial access to an external line eliminating the need to go through an attendant to make phone calls.

2.2 Direct Inward Dialing (DID)

Direct inward dialing (DID) provides direct dial access to the guestroom eliminating the need for an external caller to go through the attendant to call a guest.

2.3 Cyclical DID

DID assignment at check-in is a feature of a guest-based configuration. The oldest used DID number is automatically assigned to the newest guest. This circular assignment of DIDs helps prevent a new guest from being disturbed by an external phone call addressed to the previous occupant. Cycling of DIDs can be managed:

- By a hotel terminal
- Through AHL by an external application such as CMS or PMS

2.4 Speed Dialing

Hospitality services like room service, front desk, bar, restaurant, or laundry can be called by dialing one or two digits or by using preprogrammed keys. A time delay is used if a digit is also used as the first digit of another number, for example, room "2602" and room service "2".

2.5 Redial Key

Reflexes and Alcatel-Lucent 8 and 9 series set offer a redial key. This can be used to redial the very last number dialed on the set or to access a list of the last eight numbers dialed previously.

2.6 Unanswered Calls

Unanswered calls can be stored and viewed on the guest's set. When a set is shared between several guests, the guest's secret code is requested to consult these calls.

2.7 Call Forwarding

Calls to a room set can be forwarded by guests and hotel staff. Depending on user choice calls can be forwarded:

- When the set does not answer
- When the set is busy
- In any case

Calls are forwarded according to user selection, to:

- The set's voicemail
- Another set in the system

2.8 Do Not Disturb (DND)

When a guest activates the do not disturb (DND) feature by using a prefix or a preprogrammed key, the phone is designated as busy for internal and external calls, which allows the room handset to be used for making calls. Hotel staff may also program a Do not disturb on a guest set from the hotel terminal or their own set. When off-hook, the guest receives a voice prompt indicating that the handset is in DND. The set display indicates the set is in Do not disturb (either permanently on Reflexes, Alcatel-Lucent IP Touch 4018 Phones, and Alcatel-Lucent 4019 Digital Phones, or as a pop-up window and the Info page on all other sets of the Alcatel-Lucent 8 and 9 Series).

Wake-up and message information remain available, and for security, only attendant calls and fire alarms may override DND. If there is an attendant call, the attendant console indicates the:

- Call source (calling party)
- Trunk group number
- ISDN calling number, if available
- DND icon
- Number of the handset in DND (called party)

The rooms in DND status may be listed and printed from the hotel terminal.

2.9 Wake-up or Reminder Calls

The guest may program a wake-up or reminder call directly from the room handset by dialing a prefix or pressing a preprogrammed key. The guest is guided by voice prompts and the wake-up time is automatically confirmed. Hotel staff may also program a wake-up for a guest from the room service handset, the attendant console or the hotel terminal. The maximum number of wake-up calls programmed per room or guest is four. The requested wake-up call can be listed and printed from the hotel terminal.

When the guest answers the wake-up call, they will hear music or a voice prompt presenting the wake-up time. An information record for the call is simultaneously printed on the wake-up printer. If there is no answer to the wake-up call, the OmniPCX Enterprise Communication Server application will call again later. The time before another attempt is made is two minutes, but the recall timer is configurable and can be adjusted. If there is no answer after the second wake-up call, an alarm message is sent to the wake-up printer.

2.10 Voice Mail Services

2.10.1 Check-in/Checkout

At check-in or checkout, the OmniPCX Enterprise Communication Server application interprets PMS or CMS commands carried over an AHL link and assigns a mailbox to a guest, if required. The creation of a mailbox does not require a room assignment. In a guest-based configuration, pre-check-in allows entering the guest into the database without assigning a room, and then a mailbox can be created.

2.10.2 Mailbox

The Alcatel-Lucent integrated voice mail application (4645) offers advanced hospitality voice mailbox service. At the first off-hook, the guest is directed to voice mail and invited by the application to record their name and a greeting message. The user can then take advantage of the following features:

- Friendly guest user interface
 - Voice guides in the guest's native language
 - Short, clear, and concise prompts
 - Automatic save of the listened to messages. Messages are saved for a configurable period of time (time related to message length and message storage time)

- Main voice mail features
 - Replay a message
 - Archive a message
 - Erase a message

2.10.3 Room Move

In a guest-based configuration, a guest may move to another room and automatically retain their mailbox, with no changes required by the hotel staff or the guest. When a guest changes the extension number, the mailbox number will change accordingly.

2.10.4 Deferred Mailbox Deletion

The guests can review their messages after checkout time. This feature is active only when the mailbox contains new messages at checkout time. The extendable lifetime of a mailbox is a system parameter. When the next guest checks into the room, previous messages are deleted.

2.11 Call Restriction

The guest room call restriction feature provides the following services:

- Automatic DID deactivation: It is possible to route external incoming calls to the attendant during a fixed period of time. The guest is not to be disturbed by direct dial calls.
- Inter-room call restriction: Inter-room calls may be restricted during a daily fixed period of time. Any inter-room calls may also be rerouted to the attendant console.
- Manual phone lock-unlock: A guest can lock or unlock the room phone by dialing a prefix (or pressing a programmed key). The user is guided by voice prompts while setting up this service.
- Automatic room phone locking: After "N" wrong attempts, the room phone can be automatically locked.

2.12 Message on Free or Busy Phone

A guest can receive an information message originating from the:

- Message service or attendant console
- External application through AHL
- Front desk terminal

The message lamp, if available, flashes after a message is received, and the message may be collected automatically. When the device goes off-hook, the guest receives a routing tone and is connected to the message service or to the message originator (voice mail, etc.) after a programmed amount of time.

2.13 Privacy

The privacy feature allows anonymous calls between guests. Caller information is not displayed on room phone, but remains available for hotel staff like room service, and the front desk.

2.14 Dual-line, Consultation Call, Broker Call, Transfer, and Conference

The dual line feature on the Reflexes phone allows a guest to receive a second call when on a prior call. The guest can answer the second call by pressing a preprogrammed key and can go back to the first call by pressing the same key (broker). The guest may set up a conference by pressing the conference key, or transfer a call by pressing the transfer key.

On Alcatel-Lucent 8 and 9 series sets, the menu page provides access to all these options.

2.15 Room Move

In a guest-based configuration, a guest can change rooms without checking out by using the "auto-assignment feature" which easily changes the room number. All guest characteristics, parameters, and services are automatically transferred to the new room.

2.16 Partial Checkout

In a guest-based configuration with partial checkout, a guest may check out of a hotel without canceling phone services. This is convenient for guests who will return and want to keep the same phone service. Items such as password, DID number, or voice mailbox are available when the guest returns. These may be temporarily assigned to a second guest until the first guest returns to the hotel. When the first guest returns, they can retrieve all their messages even if the room they are checked into is different from the previous one.

2.17 Multiple Languages

The OmniPCX Enterprise Communication Server application is multi-lingual. Up to eight different languages may be used on the display pad and for the voice prompts. The language of the guest is recorded at check-in and a letter indicating this language is displayed on staff set whenever the set is called or calls reception.

2.18 House Phone

A guest may also call from a house phone. Two options are available:

- Using a personal password: The guest enters their room or guest number (in a guest-based configuration) and the personal password that was assigned at check-in. The room or guest bill is automatically updated at the end of the call.
- By attendant console: The guest indicates to the attendant their room or guest number (in a guest-based configuration) and the number they want to reach. The room or guest bill is automatically updated at the end of the call.

3 Front office services

3.1 Individual Check-in

The following information is required at check-in:

- Room number
- Assignment of the DID number
- Mailbox assignment: Y/N
- In a guest-based configuration, a guest number is required, but may be automatically assigned by the application at check-in
- Guest name
- Language spoken
- Password (required for the use of house phones)
- VIP attribute
- Type of occupancy of the room (single or multiple)
- Value of the initial payment (deposit)
- Authorization or restriction of direct access
- Time of wake-up call (if desired)

After check-in, the charging counters are reset to zero. The previous services activated such as DND and the wake-up voice mail greeting and message are canceled. The room status is updated and the client name is changed in the general "call-by-name."

3.2 Group Check-in

The arrival of a group requires two types of data:

- Information common to all the stations of the group: number and name of the group, assignment of the DID number, language code, initial payment, time of wake-up call
- Information specific to each guest in the group: room number, guest number (in a guest-based configuration) and type of occupancy

After the entry of data specific to each guest, the room number is automatically written to the guest follow-up table and the "number of rooms for the group" counter increases incrementally. The client names are changed in the general "call-by-name" to be the same as for individual check-in.

A group arrival can be simultaneously handled at different front office terminals.

3.3 Guest Directory

Staff can search guests in the dedicated directory managed by the application by alphabetical order, by room number or by name.

3.4 Room Service

- The guest can call for room service by floor or section by dialing a single phone number.
- When a room service call comes in on an Alcatel 4035 phone, the station's display indicates the phone number of the room, the name of the user, the language, and the VIP call.
- The room service staff can also have several different telephone numbers to allow room service personnel to distinguish the different types of room service.

3.5 Room Management

Staff can manage or select rooms by:

- Room type
- Occupancy status of rooms

The hotel staff can change or modify the status of a room by dialing related codes on the room phone, with or without employee identification. The change may be the status of the room such as clean, available, or additional work needed.

Additionally, the changes can be automatically printed on the service printer, where the maid or maintenance staff can be notified of the status of the room at any time.

3.6 Charging

The hospitality application provides billing services in two modes:

- Charging by time
- Charging by units (pulses)

3.6.1 Charging by Time

The call cost calculation is based on table data. The following information is stored in the table:

- Cost per direction, 1,000 available
- Thirty charge scales
- Five tariffs by day according to time slot
- Predefined bank holidays

If a PMS is in operation, the OmniPCX Enterprise Communication Server application delivers AHL records with:

- Call duration and cost
- The number dialed by the guest
- The trunk group number

This service is not compatible with the deposit feature.

3.6.2 Charging by Units (Pulses)

The call cost calculation is as follows:

- Charges assessed by length of call or by number of units
- Calibration of cost per unit
- Charging unit counters for each room
 - Total cost
 - Number of calls
 - In deposit mode: balance paid and call costs
 - Reset at zero on new guest's arrival
- Call records
 - Printed progressively or on demand
 - Capability of masking from one to four of the final digits

The price is calculated according to the following formula: $P = N1P1 + N2P2 + N3P3$ where:

- Price P1 of the first N1 charge units
- Price P2 of the following N2 charge units
- Price P3 of the remaining charge units (N3)
- Prices P1, P2, and P3 have three digits and a floating decimal point

3.7 Prepayment (Deposit Mode)

The prepayment or deposit option allows the guest to place a deposit on an account that may be applied against the future phone bill. The amount of the deposit can be predefined in the system.

- When the deposit reaches the first threshold, the guest is informed during the call by a beep tone.
- When the deposit amount is reduced to zero
 - Direct access is blocked
 - The call in progress may be cut off
 - Call record prints on printer
 - A voice prompt at next off-hook informs the guest of the deposit amount status
 - On the next attempt to make an external call, the guest is automatically routed to the attendant with the following message displayed: "MCDU Dept"

3.8 Multiple Carriers

The OmniPCX Enterprise Communication Server may be connected to several service providers or carriers with or without advice of charge. With advice of charge, the OmniPCX Enterprise Communication Server ARS automatically selects the lowest cost service provider. The digits sent to the carrier may be different from the digits sent by the guest to place the call.

In this configuration, the time-based charging feature may be configured where the cost is calculated using the digits sent:

- By the user (before ARS conversion), and at checkout, the guest views the calls with the original dialed number.
- On the line after ARS conversion. The digits that are in the final record are those sent on the line and not those dialed by the guest.

If there is an external hotel application, the OmniPCX Enterprise Communication Server connects via AHL. The records include the following information:

- Call duration and cost
- The number dialed by the guest or the number sent on the line
- The trunk group number

3.9 Billing

The bills may be issued using two currencies, for example, EURO + local.

3.9.1 Storage

The records are stored on disk (by request). When the next guest checks in, the data stored on the assigned sector is deleted and any additional sectors are returned to the "common pool."

3.9.2 Printing Guest Records

A guest record can be printed on a printer with an eighty-character line width in real time or as a scheduled print job. The record may contain the following information:

- Phone number
- Cost center (service)
- Call mode
- Time and date
- Length of time
- Cost calculated from the number of charge units
- Number dialed

3.9.3 Printing Staff Phone Records

By using a system management command, the staff phone records may be printed in the same format. However, the cost is calculated by multiplying the number of charge units by a "Staff phone basic charge unit" price.

3.9.4 Dialed Number Mask

The dialed number mask feature is available for screen displays, printouts or external transmissions, making it possible to mask the last one to four digits of the number dialed (programmed on installation). Masked digits are replaced by periods. For numbers with fewer than five digits, the first two digits are retained.

3.9.5 Specific Online Printing

Records may be printed on demand for:

- One or a series of rooms or users
- A specific number dialed or a specific direction
- Cost exceeding a threshold
- Duration exceeding a threshold
- Specific manner of obtaining calls (transfer, etc.)

3.9.6 Transfer of Call (Outgoing Call) to a Guest

If a call is made by an attendant console or hotel staff and transferred to a guest, the guest is charged for the whole call; only one record is issued and it is associated with a specific manner of obtaining the call.

3.9.7 Record Transfer

From a hotel terminal, it is possible to transfer a record from one extension to another. For instance, calling a taxi from room service.

3.9.8 Pre-assignment Record

From a house phone (booth, bar, lounge, etc.), it is possible to specify the extension to which the next call made from that house phone must be assigned.

3.9.9 Itemized Bills

The hotel management can request a guest's itemized bill until the check-in of the next guest occupying the same room. When the bill is printed, there is no reset or cost change.

3.10 Dynamic Suites

In a guest-based configuration, it is possible to dynamically associate various rooms to create suites with the following calling characteristics.

3.10.1 Making Calls

The internal calls between room phones are available. If prepayment is required, only one external call at a time can be made per suite. If no prepayment is required, guests can call from any phone at any time.

3.10.2 Receiving Calls

An incoming call rings all free phones in the suite. If all suite phones are busy, the incoming call is parked. Guests are informed by a beep and they may use the dual-line feature.

3.10.3 Do Not Disturb (DND)

Programming a DND in a suite means that DND applies to all suite phones.

3.10.4 Wake-up

Programming a wake-up call in a suite means that the wake-up service will ring all the phones in the suite, but individual room wake-up or reminder is still available.

3.10.5 Dual-line, Transfer, and Conference

Dual-line presents the same functionality in a suite as in a room. Transfer and conference calls may be either internal or external:

- Between rooms of the suite
- External room/phone/trunk

3.10.6 Voice Mail

The voice mailbox is assigned to one guest; the message notification is activated on all room phones.

3.10.7 Room Phones

The following telephones may be associated:

- Reflexes phone
- Alcatel-Lucent 8 and 9 series sets
- Analog phone
- DECT phones (in association with a fixed phone - twin-set configuration)
- S0 devices
- Fax (analog or S0)

3.11 Guest Departure

3.11.1 Individual Checkout

Guest checkout is prohibited if either the room phone or password is in use. If not, the checkout operations are the following:

- Printing a standard bill
- Cancellation of direct access
- Mailbox deactivation
- Notification of number of unopened messages
- Cancellation of waiting messages
- Cancellation of do not disturb
- Cancellation of external line access
- Change room status from "occupied" to "to be prepared"

3.11.2 Group Checkout

Group departure allows checkout to be performed with a single command, after the required verifications are made (same as for guest departure). The checkout procedures are:

- Print a standard bill for the group followed by standard bills for each group member
- Cancel the number of the group
- Cancel the waiting messages
- Mailbox deactivation
- Notification of number of unread messages
- Cancel do not disturb
- Cancel external line access
- Change room status from "occupied" to "to be prepared"

3.12 Night Audit

At fixed time periods, or on demand by the night audit manager, the system automatically reports the daily telephone costs for each room, the administration and the attendants, with or without resetting the counters to zero.

3.13 VIP calls

The system can be configured so that calls from VIP guests have a different display and unique ringing tone on the Alcatel-Lucent 4059 Attendant Console.

3.14 Access to Management Application

The hotel staff can access the hospitality application through a dumb terminal. In addition, information such as bills, wake-up, and room status can be sent to a printer.

3.15 Alcatel-Lucent Hotel Link (AHL)

The OmniPCX Enterprise Communication Server can be connected to a specialized computer by means of an asynchronous, two-way V24 connection, with a rate of 300 bps to 19,200 bps, or through an Ethernet TCP/IP connection.

The ASCII characters may be:

- At seven or eight bits
- Even or odd parity
- One or two stop bit(s)

All sources previously described for guests, front office, and night audit are available through the EDP terminals. In addition, the mini-bar status may be managed directly by the maid from the room phone. If there is an EDP crash, the OmniPCX Enterprise Communication Server can send telephone records in real time to a predefined printer. A specific command can synchronize the OmniPCX Enterprise Communication Server guest database and EDP database.

3.16 Networking

Call accounting and the AHL link works in the network configuration allowing:

- Access to multiple carriers
- Attendant centralization
- Real-time deposit management
- Call cost simulation
- Call accounting based on milliseconds in real time
- Centralization of PMS/CMS on TCP/IP AHL