

# **UNIVERGE SV8100**

**Hotel Manual** 

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# 1 Hotel Manual

# 1.1 Hotel - System Setup

# **Hotel - System Setup**

With **V7.00** or higher software, the following features were added:

- View current room status in Web Pro and Phone Pro.
- The ability to change from any room status to any other room status.
- Automatically set room status on check out to any valid room status option.

With **V8.00 or higher** software enhanced flexibility was added for the display of guest names, entered via PMS interface, on hotel and/or staff phones.

With **V9.50 or higher** software the SV8100 now support Hotel features at a Standard SIP devices. Prior to V9.50 only an SLT or DT300/700 terminals supported hotel features.

- The following features are supported, any features not mentioned should be assumed to not be supported:
  - Wake-up call
  - Do Not Disturb
  - Room Clean Status (for Hotel staff)

# **Room Telephone**

Each telephone in a hotel room must be assigned in <u>Hotel Room Extension Setup</u>, this will allow the receptionist to check the room in/out, set room status and hotel features.

You may also want to check with the hotel manager which features (service codes) the hotel room telephones have access to, most features are available at default, you may need to place the hotel room telephones in their own Class of Service number in <u>Class of Service per night mode</u> and disable some features in COS.

It is common for the extension number of the telephone to be the same as the hotel room number, use <a href="System Numbering">System Numbering</a> to setup the system numbering plan and assign the telephone numbers to the hotel room telephones in Extension Basic Setup.

If the telephones in the room support Caller ID you can enable this per extension in <u>SLT Basic Setup</u>. From R3 software the Last Number Dialled and Caller ID history is deleted upon checkout.

# **Reception Telephone**

The hotel reception telephone will be used to check rooms in/out, set room status and assign hotel features, it will also be the extension called when a room dials the Operator/Reception service code. The reception telephone may also have a DSS console assigned to show the status of all hotel room telephones.

The reception telephone should be assigned the following features in <u>Hotel Class of Service Setup</u> (the Class of Service number is assigned to the telephone in <u>Class of Service per night mode</u>; you may want to put only the reception telephone in its class of service number):

Check In Operation

**Check Out Operation** 

Room Status Output

Changing DND for other extensions

Wake-Up call setup for other extensions

Changing room status for other extensions

Changing restriction class for other extensions

Room to Room Call Restriction

The hotel reception phone may also want the DND/Call Forward override option enabling in COS.

The system also has a room monitor option which must be setup between two single line telephones, therefore you will need to install a seperate SLT at reception for this.

The telephones at reception and in the rooms will need 'SLT Room Monitor' set in <u>Hotel Class of Service</u> Setup.

Note: Up to a maximum of 16 telephones can be set for Wake Up calls for the same time. If more then 16 telephones are set for the same time, the time for the Wake Up Call for those additional phones is moved to the next minute.

### **Operator/Reception Service Code**

The system can have a service code assigned to call to operator/reception telephone.

The service code must be assigned as 'Operator' in <u>System Numbering</u>, the extension number to be called is then assigned in <u>Operator Extension</u>.

### **Hotel DSS Console**

The reception telephone can have a DSS console assigned that will show the status of the hotel room telephones (for example checked in, vacant, room clean).

The DSS console is set to hotel mode and assigned to the receptionist's telephone in <u>Hotel DSS Console</u>. The lamp flash patterns can be changed in DSS Console Lamp Table.

The DSS console keys are assigned in  $\overline{DSS}(X)$  Keys (where X = 1, 2 or All).

# **Toll Restriction**

When a room is checked in the telephone can be given a different Toll Restriction class, this would usually have no restrictions. When the room is checked out it would typically have a fully restricted.

The toll restriction class when checked in is assigned in Hotel Room Extension Setup.

The toll restriction class when checked out is assigned in Hotel Room Extension Setup.

# Changing Toll Restriction class while room is checked in

The Toll Restriction class number can be changed for a room telephone when checked in.

The system should be setup with different Toll Restriction levels (for example No restriction, National calls barred, all calls barred) to make use of this feature.

The reception telephone will need the 'Changing Restriction Class for other extensions' option enabled in Hotel Class of Service Setup.

# **Class of Service**

All extensions (including hotel room telephones) are assigned a Class of Service number in <u>Class of Service per Night Mode</u>.

The class of service number assigned to the hotel room is not effected when the room is checked in or out. As well as the standard system features in <u>COS</u> there are also some hotel related features in <u>Hotel Class</u> of Service setup.

# Single Digit Dialling

Hotel room telephones can have single digit dialling to simplify the telephone operation.

The single digit can be translated into any Service Code, extension number or Department Group pilot number.

Hotel single digit dialling is setup in Hotel Single Digit Routing.

### InMail Card

The optional InMail card can provide voice announcements for Wake Up Calls at the room telephone. The system can play an announcement when the guest sets and answers their Wake Up call.

## **Print Out**

The system can print out the following reports via a CTA adapter (Serial adapter) or via the LAN interface using the port defined in PRG10-20-13:

Note: CTA fitted to Model C telephone is not supported on an LTA blade.

### Reports Output by using service code 742 (Refer to Hotel - Receptionist Guide for instructions)

Room Status Room Call Restriction Do Not Disturb Message Waiting Wake Up Calls

# Reports Output automatically if set in Hotel Report Printing

Wake Up Calls not answered Check Out sheet

### Wake Up Call not answered output

The system will print out the following message when a room telephone does not answer their wake up call.

The print out occurs when the wake up call ringing ends; 30 seconds at default set by 'Alarm Clock Duration' in <u>System Timers</u>.

Wake Up Call No Answered --- TEL No.236 Set Time07:00 No Ans Status Time Out

**END** 

### **Check Out Sheet**

The system will print out the following message when a room is checked out

Check Out Information --- TEL No.236 Check In 10/04/06 17:33 Check Out 12/04/06 08:45 Call Count 0

**END** 

Note that the Call Count information does not operate, the value will always be 0. Use the SMDR output for call information.

# Call Logging - SMDR

In order to charge the guest for their telephone calls you must connect a Call Logging device to the system, refer to the SMDR section of the system manuals for details.

The system does not support call costing for analogue trunks, this must be done by the external call logging device.

The system does support Advice of Charge for ISDN lines, this is setup in  $\underline{COS}$  for  $\underline{AOC}$  &  $\underline{Cost}$  Multiplier  $\underline{AOC}$ .

# **Hotel Guest Name Indication**

Prior to V8.00 software the name of the hotel guest, as entered via the PMS interface, was only displayed on non-hotel Dterm extensions. From V8.00 software this feature has been enhanced by the addition of 3 new programming commands in order to specify onto which Dterm extensions the guest name is displayed. The commands are:

- PRG42-03-14 Show guest name on other guest phone. This enables the display of hotel guest names on other hotel phones. E.g. when calling from room 210 to room 211.
- PRG42-03-15 Show this guest name on staff phones. This permits the display of the selected hotel guest names on staff (non-hotel) phones. If this is disabled then the guest name will not be sent to be displayed on a non hotel phone.
- PRG42-03-16 Show guest name on this staff phone. This permits the display of hotel guest names on selected staff (non-hotel) phones. If this is disabled the hotel guest name will be sent but not displayed on the non-hotel guest phone.
  - ✓ Be aware that the commands work in conjunction with one another.

# 1.2 Hotel - NEC PVA PMSU Blade Configuration

# **PMS interface Unit Manual**

# Overview

The PMSU is an application, placed logically between one or more SV8100 PBX systems and a PC containing 'Front of House' Hotel software in order to translate the hotel and SMDR information for the front of house software.

With the PMSU, the Front-of-House software may restrict calls to certain numbers and may collect the call charges. the staff can enter the room state and minibar consumptions at the room's phone. Additionally, the PMSU controls the hospitality function of the voicemail system, UM8000. This allows unlistened voicemail messages to be reported to the Front-Of-House software and that the voicemail announces messages left at the front desk.

# **Hardware**

The PMSU application software runs from a CF-card inserted into a PVAA blade which uses a slot in a SV8100 system. Updates may be installed using a USB memory stick plugged into the USB host socket. The Ethernet connects the PMSU to the telephone systems, the voicemail system UM8000 and to the Fidelio interface computer IFC. The IP settings of this Ethernet interface are controlled by the SV8100.

The PMSU IP address is set as follows:

- PRG 10-55-01
  - For the required slot set the IP address for the PVA blade
- PRG 10-55-04

For the required slot set the subnet mask for the PVA blade

All other settings are then configurable via the web interface.

# **Protocols**

The PMSU connects with one or two TCP/IP connections to the SV8100s.

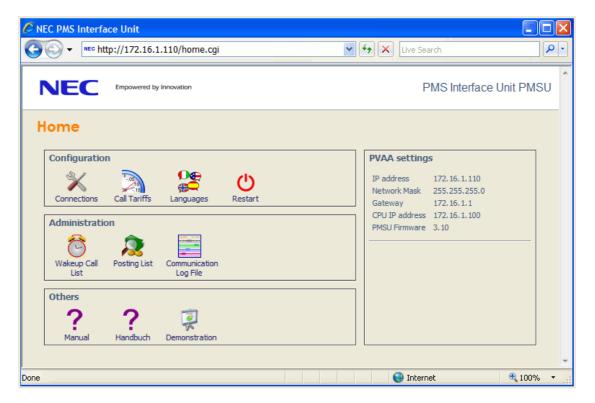
One connection is using the Nitsuko PMS protocol to control the features and to get results and status reported. The second connection is attaching the SMDR port to collect the call charge information. The PMSU has been designed to work to the Fidelio Interface Application Specification (FIAS) 2.11 and has been approved by micros FIDELIO to work to this specification.

The connection to the UM8000 is using the FIAS2.11 Fidelio protocol as well.

# **PMSU Web Interface**

The PMSU provides a web server for the purpose of configuration and maintanance. The web access to the PMSU is password protected. On the first access, the browser will open a dialog box requesting the user name and password - the following should be entered:

- Username= admin
- Password = nec-pmsu



The homepage of the PMSU is divided into four fields, grouped into a left and right panel. In the right panel, static information is displayed like the firmware version, but also its IP settings which are taken form the SV8100. In the left panel, there are three fields with icons which open additional pages.

### Configuration

This field is for configuring the PMSU settings, a click on the restart icon restarts the application and allows the changed settings to become active.

# Administration

In this field are tools for maintaining the running system.

### Others

Here are the on-line manuals as well as the demonstration applet. Within this manual, a click on one of the icons jumps to the appropriate chapter.

# **PBX Configuration**

In addition to the other configuration settings required for hotel operation on the PBX, it is necessary to set specific programming commands for the PMS adapter to operate correctly in conjuction with the hotel operation.

### System IP Configuration

It is necessary to configure the IP address of the PBX for the PMS and SMDR connections.

This is achieved as follows:

### • PRG 10-12-01

Set the IP address for the PBX system.

### • PRG 10-12-02

Set the subnet mask for the PBX system.

# • PRG 10-12-03

Set the IP address of the default gateway

# PMS Settings

In addition to the IP address the PMS interface requires configuration changes on the PBX in order to communicate successfully.

Although most of programming commands PRG 42-06 and PRG 42-08 may stay at default the settings are listed for reference:

### PRG 42-05-01

set the protocol type to 1:"Fidelio" This will enable the room status code translation of PRG 42-08.

### • PRG 42-06-01

set the system port for the PMS connection (the default is 5129).

### • PRG 42-06-02

3:00am AutoRoomScan

If set to 1:On, all checked-in hotel rooms are automatically scanned at 3:00am, set to status 2 = dirty and reported as such to the PMS. If PRG 42-05-05 ist set to 1, the status is translated according to PRG 42-08.

Default = 0:Off

### • PRG 42-06-03

Check In Message Type

If set to 1:On, a message is sent to the PMS when a room is checked in at the PBX.

Default = 0:Off, Rooms are never checked in from PBX.

### • PRG 42-06-04

This defines the the room status change when a clean occupied room (with status 1) is checked out

0 = Off - the PBX sets the room state to 0 = clean, inspected and vacant

1 = On - the PBX sets the room state to 4 = inspection required and sends an appropriate message to the PMS. If PRG 42-05-05 ist set to 1, the status is translated according to PRG 42-08. Default = 0:Off.

When the PMS checks in a guest, the room state will be changed to 1 (clean and occupied), when it was 0 (clean and vacant) before. Both mean 'clean'. So actually, checking in a guest does not change the room state. FIAS 2.11 does not specify setting a room state by the PMS, only reporting by PBX.

# • PRG 42-06-05

Are You There - this is the time in seconds that the system will wait after every message and then send an 'Are You There?' message to ensure network connection integrity.

Default = 10 seconds.

# • PRG 42-06-06

Are You There retry count - this is the number of times the system will retry un-acknowledged 'Are You There?' messages.

If the message is unacknowledged after the specifed count, the PBX states the PMS link is inoperational (off-line).

# • PRG 42-08-01

This is a translation table which converts the room state the maid enters using service code 740 (PRG 11-14-14) or 741 (PRG 14-14-15) and the vacancy status (0 = occupied, 1 = vacant) to a combined room status code and a describing clear text which is sent to the PMSU and finally to

the Fidelio PMS.

Within the PBX, the assignment is as follows:

- 0 'clean and inspected', when vacant
- 1 'clean, inspected' when occupied
- 2 'dirty'
- 3 'maid in room/cleaning in progress'
- 4 'cleaned, needs to be inspected'
- 5 'needs a repair'
- 6 'out of order'

The normal sequence is therefore 1 -> 2 -> 3 -> 4 -> 1. Setting a room status of 0 or 1 is equivalent and does not change the vacancy or occupied state. The PBX uses for automatic room state changes only the codes 0, 1, 2, and 4

FIAS2.11 specifies only 3 room states that are combined with the vacancy status, which is not changed when a room status code is received. Nevertheless, the room status code sent by the PBX shall match the vacancy status.

- 1 dirty and vacant
- 2 dirty and occupied
- 3 cleaned, to be inspected and vacant
- 4 cleaned, to be inspected and occupied
- 5 inspected and vacant
- 6 inspected and occupied

Out-of-order and similar states are entered at the hotel software directly and cannot be set from PBX.

### **SMDR Configuration**

If advice of charge is available at the trunk lines, the SMDR output should also be configured in order for the PMS adapter as per the following commands. The PMSU can forward the received SMDR records for another software on the same TCP port on which it collected them at the PBX. The PMSU receives a meter pulse count and calculates itself a price for the call. If no charging information is available, it is not necessary to configure SMDR on PMSU or PBX. The PBX will send SMDR information for hotel phones over the PMS link. In this case you should configure the call charging tariff table.

### PRG 20-05-07

Set the output format to 0:no decimal point. The PMSU needs to receive the number of charging units, not a charge per call.

# • PRG 20-05-04

Set the amount per pulse to 1.

## • PRG 20-26

Set this scaling factor to 100% for the station group the hotel rooms are member.

### • PRG 35-04

Set an SMDR pattern for the station group the hotel room extensions are members of. Ideally, the hotel room extensions should be in their own extension group to prevent hotel rooms being able to dial unrequired extensions, see Department groups and also configure one digit dialling in PRG 42-04.

## • PRG 35-01-01

output port type. For the SMDR pattern relating to the hotel extensions, this should be set to 'LAN'.

### • PRG 35-01-08

output format. For the SMDR pattern relating to the hotel extensions, this must be set to '2'. Format 1 does not provide charging information.

# • PRG 10-20-01

for Ex-device 5 the TCP port should be set to an available setting, e.g. 4000.

### • PRG 35-02

SMDR settings - the majority of this command can be left at default, the only changes that are specifically required to be changed are as follows:

# • PRG 35-02-07

Cost charging - this should be set to 1:Output.

### • PRG 35-02-09

Extension Number/Name - this should be set to 1:Number.

The PMSU buffers and replicates the SMDR data on the same TCP port as it receives them from the Aspire system. This way, a second software requiring SMDR data can collect them from the PMSU.

### Additional hotel commands

In addition to the normal hotel commands, e.g. PRG 42-02 (Hotel telephone), PRG 42-03 (Hotel class of service setup) etc. see Hotel - system setup, additional service codes are available

### PRG 11-14-18

Set hotel PMS Toll restriction - default = 766

### • PRG11-14-19

Hotel room data

default = 781. For 'minibar' charging from a room, dial this service code, then item code, hold, quantity, hold. You may repeat the sequence item code, hold, quantity, hold as often as necessary without redialing the service code.

### Operator Telephone

It is important that an operator extension is set for the PBX, this is typically the Front of House receptionist. This is configured by the following command:

### • PRG 20-17

Operator's extension

Also a number for calling the operator must be defined in the numbering plan

### • PRG 11-01

System Numbering

# Tips for the Installers

### Time synchronisation

The PMSU synchronises itself to the time and date it retrieves from DA and TI fields in LA, LS, and LE messages from the Fidelio PMS. The PBX is not synchronised and its time will differ from that of the PMS. The PMSU compensates this by maintaining a time offset range between PBX time and PMS time. This offset is adjusted when the PBX reports the result of wakeup calls.

It is a good idea to have once after installation a wakeup call expire to initialise the PBX time offset compensation.

# PMSU is guest based

The PMSU provides a guest based method for checking in or out guests as well as message indications. Room-based features like Do-not-disturb and dial restrictions are spread to all guests within that room. Some Versions of Opera or Fidelio send a room based feature with a reservation number; the reservation number will be ignored in these cases as agreed with the micros development team.

# Features move with guests

If guests later move in or out, the effective setting for the rooms may change. A room always gets the most restrictive dial restriction of all guests. This applies especially for restricted guests moving into until then unrestricted rooms. A Do-not-disturb status of a room is not changed when guests are joining or leaving guests in a room.

# Wakeup calls

It is possible to set multiple wakeup calls per room, for one or several days. A guest may only cancel the wakeup calls, she has set. The last guest leaving a room takes her wakeup calls to the new room.

### Message Lamp

The guests message waiting lamp status is always following the guest during room moves. The PBX cannot change this state while it is set by the PMS.

### Message-Waiting indication at the front desk phone

The PBX sets the message-waiting relation between the hotel room phone and the first extension configured in PRG 20-17. As a side effect, the message lamp will also be lit at the front desk phone and the display shows a message waiting condition. To avoid this, use this trick:

In PRG 20-17 set an unused analogue extension port at the first position and the front desk phone behind it. Both phones shall be configured in PRG 16-02 into an own, common station group, which gets in PRG 16-01-03 the routing when busy enabled. The trick is now to busy-out the analogue extension with a loop plug. Calls to this phone or to the operator will then automatically skip this phone and ring the front desk phone, showing the guest name.

# Front desk calls and MessageWaiting using AspireNet

In a configuration with more than one PBX system, a Centralised Operator has to configured. Only one system will actually have a receptionists phone connected and listed in PRG 20-17. Here the operator's number is configured as operator call in PRG 11-01.

In the other systems an extension (e.g. a Mobile Extension) with permanent immediate call forward is used as a placeholder for the operator's phone in PRG 20-17. In PRG 24-06 an immediate call forward is set to the operator's number, which is configured in PRG 11-01 as network route to the system with receptionist's phone.

# **Fidelio Settings**

The micros FIDELIO interface code to be entered at the IFC is: NCP.

### Name transmission

Check that the guest name is sent from the PMS software properly formatted, the interface likes to have the guest's first and last name separately. Also the guest's title has an own field in the Check-In message. The Aspire will store the Guest's last name at the room's phone.

If wanted, the Micros Fidelio software can be configured to add the title to the last name before it is transmitted to the PBX.

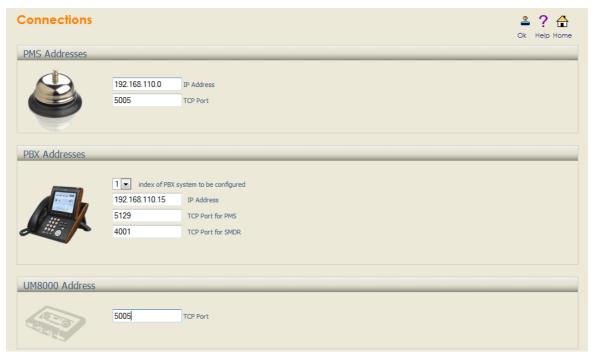


# **Restarting the Firmware**

Clicking this icon will restart the PMSU application and let changed settings take effect. The PVAA itself will not be restarted.



# Configuring Connections





Opens the manual



Returns to the Home Page without saving



Applies the changes

The configuration page checks the IP addresses and TCP ports for syntax, consistency and legal values. Each IP address must consist of exactly four integer numbers in the range 0 to 255 seperated by a dot. The gateway IP address must be in the same network as the PMS adapter. The network mask must be a legal one, etc.

Any entry found to be faulty is marked with red color. If no error is found, the above settings will be written to the configuration file.

Click on the restart icon in the home page to let the changed settings take effect.

It is necessary for the Front Of House software to be running in order for the PMS interface to attempt to establish a connection with the PBX.

In the configuration page it is possible to configure the settings for the PMS adapter to operate successfully with the PBX and PC containing FIAS 2.11 compliant Front of House software.

It will probably be necessary to consult with the customers IT department in order to configure the following settings.

Make sure that the PBX configuration is correct.

# **PMS Addresses**

These are the settings relating to the customers PC containing the Fidelio, or equivalent, Front of House hotel software.

# IP Address

this is the IP address of the PC containing the Front Of House software.

## TCP Port

this is the TCP port configured on the PC for the PMS information.

# **PBX Addresses**

These are the settings relating to the PBX.

# IP Address

this is the IP address on the PBX, as set in PRG 10-12-01 or PRG 10-12-09. You may configure it as the Hotel PBX may be different than the PBX the PMSU is inserted in. The IP address 0.0.0.0 is valid for the second and further PBX systems and disables the connection.

### TCP Port for PMS

this is the TCP port on the PBX configured for PMS information, as set in PRG 42-06-01.

### TCP Port for SMDR

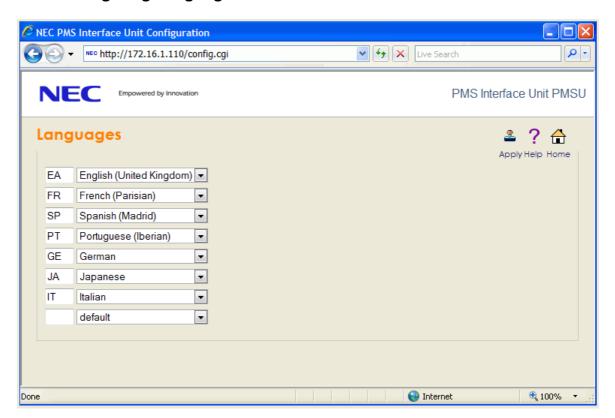
this is the TCP port on the PBX configured for SMDR information, as set in PRG 10-20-01 ex-device 5. All PBX systems *must* have a different TCP port for SMDR. This may change to a *may* have in a later version.

# **UM8000 Address**

If you want to control a UM8000 voicemail system with the PMSU, enter the TCP port here that the UM8000 shall connect to. The UM8000 must be configured to use the PMS\_FIAS2 protocol and the TCP port and the IP address of the PMSU configured there.



# **Configuring Languages**





Opens the manual



Returns to the Home Page without saving



Applies the changes

The PMSU provides support to select the prompt language of the guest mailboxes in the UM8000 voicemail system. As PMS vendors may have different encodings for languages, here it is possible to define the two-letter code used in the GL| field of check-in message in the FIAS protocol. For each code, a language may be selected. The "default" language is that of the UM8000 system itself.



# **Call Charge Calculation**

The PMSU software includes a module that calculates for each call a minimum charge based on call duration and dialled number which will be used if the carrier provides no charging information or reports less charging units.

The dialled number is checked against the records in an internal tariff database starting with the first entry and then going down the list. If it matches, i.e. if it begins with the number in the record, this record is selected to provide a *charge per interval*, a *charging interval duration*, and a *surplus charge* per call. The call duration is divided by the *charging interval duration* and the resulting interval count is then multiplied by the *charge per interval*. Finally the *surplus charge* is added and the result converted to meter pulses by dividing by the common scale factor. All division results are rounded up to the next integer before using the result.

If the calculated meter pulse count is higher than the meter pulse count provided by the network, the calculated count is used, otherwise the count provided by the network is used. This provides a fallback in case that the network does not provide call charges and keeps the ability to receive and use special (probably very high) charges for premium rate calls.

Finally the meter pulse count has to be converted to a charge to be printed at the guest's bill. This can be delegated to the PMS; then the price per meter pulse must be configured and maintained there, the PMSU will send the posting with the meter pulse count. If a (selling) price per meter pulse is configured in the PMSU, it will send the posting with a ready calculated charge to the PMS which then does not change the price.

# **Charge Calculation Example**

The guest in room 432 has called the number 11850; the call was connected for 49 seconds. The carrier signalled 28 meter pulses. This is the record that the PMSU received from the SV8100's SMDR:

009-12-08 1	0:2	1:5	0	S	MDI	R		_									
30	36	20	49	56	4f	54	20	20	31	30	За	32	30	20	30	06 IVOT	10:20 0
38	2f	31	32	20	34	33	32	20	20	30	30	3a	30	30	За	8/12 432	00:00:
34	39	20	20	20	20	20	20	20	20	20	20	20	20	31	31	49	11
38	35	30	20	20	20	20	20	20	20	20	20	20	20	20	20	850	
20	20	20	32	38	20	20	20	20	20	20	20	20	20	20	20	28	
20	0d	0a															

In the tariff database a matching entry has been found:

Number	Price	Duration	Surcharge	Comment
11850	22	12	50	local call

This means 0,22 per charging interval of 12 seconds. Additionally, a surplus charge of 0,50 is added. This brings us to the following calculation:

```
Call duration in seconds
    12
            charging intervall duration
    4,0833 intervals
    5
             total intervals
   22
             charge per interval
   110
   50
             surplus charge
             total charge
    6
            Network Price per Meter Pulse
    26,6667 meter pulse intervals
    27
             calculated meter pulses
min 28
             reported meter pulses
             total meter pulses
    28
```

The call will be charged with 28 meter pulses if no Hotel Price per Meter Pulse was defined,

```
2009-12-08 10:21:51

02 50 53 7c 50 23 39 37 31 7c 52 4e 34 33 32 7c
44 41 30 39 31 32 30 38 7c 54 49 31 30 32 31 35
30 7c 50 54 54 7c 44 44 31 31 38 35 30 7c 44 55 31
30 7c 50 54 54 7c 44 44 31 31 38 35 30 7c 44 55 31
30 30 30 30 30 34 39 7c 4d 50 32 38 7c 03
30 30 30 30 34 39 7c 4d 50 32 38 7c 03
30 30 30 30 34 39 7c 4d 50 32 38 7c 03
30 30 30 30 34 39 7c 4d 50 32 38 7c 03
```

If a 'sell' price for a meter pulse is defined, e.g. 24 cent, the charge for the call is calculated

```
28 total meter pulses

* 24 Hotel Price per Meter Pulse

= 672 total charge
```

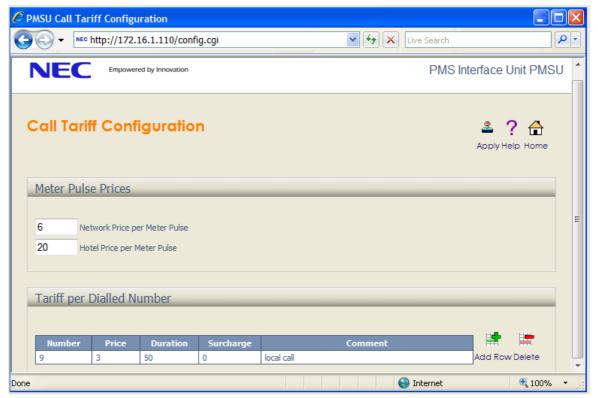
and a posting with a total amount is sent to the PMS:

```
2009-12-08 10:21:51

02 50 53 76 50 23 39 37 31 76 52 4e 34 33 32 7c
44 41 30 39 31 32 30 38 76 54 49 31 30 32 31 5
30 76 50 54 43 76 44 44 31 31 38 38 30 76 44 55
30 30 30 30 30 34 39 76 46 50 36 37 32 76 03

000049| 74572| .
```

# **Configuring Call Charges**





Opens the manual



Returns to the Home Page without saving

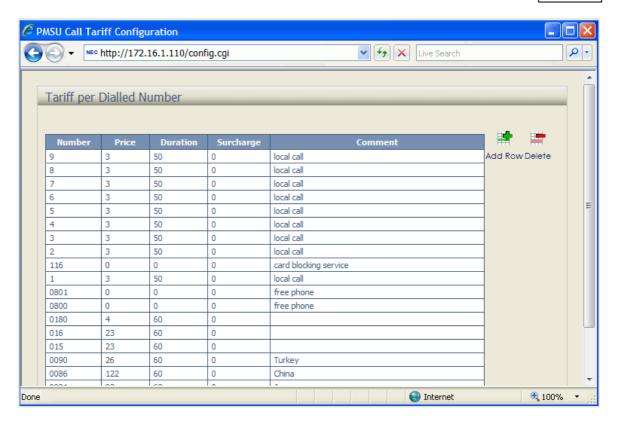


Applies the changes

In the upper area two prices can be entered. The first is the Network price per meter pulse, i.e. the cost (or buying price). This is used to calculate the number of meter pulses from the price calculated based on the tariff database. The second 'sell' price may be left empty; in this case the PMSU will send the posting to the PMS with meter pulses. If a price is given, the PMSU will multiply the meter pulses with this factor and send a posting with a total amount instead of meter pulses. This will disable the Fidelio's internal price per meter pulse.

# **Configuring Call Tariff Database**

In the second area one can edit a table with numbers and the according price details. This is the charge per interval ("Price"), the charging interval duration ("Duration"), and the surplus charge ("Surcharge"). Additionally a comment per line may be added. Simply click the entry you want to change.



To edit an entry, just click on the table cell and change the values. All numbers are integer numbers. If you have to calculate with higher precision, you may scale all prices including the prices per meter pulse (not the durations!) with an appropriate scaling factor.

The table row you clicked on, becomes the 'current' row that is used to control adding or deleting rows with the buttons:



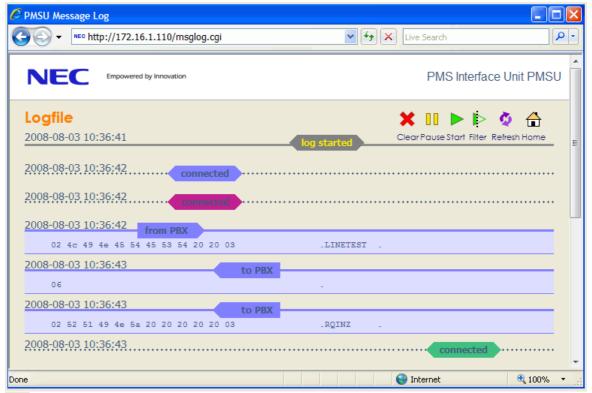
deletes the current row and saves it into a buffer. If there is no current row, nothing happens.



inserts a row below the current row and fills it with the buffered row. If there is no current row, the new line is appended to the table.



**Logging Messages** 





Stops and clears the log



Pauses the log without clearing the content



Starts logging of all messages



switches to filtered logging.

When filtered logging is enabled, the log file will store no acknowledge or keepalive messages (AREYUTHERE, LA) messages. Wake-up answer WA|... and Posting Answer PA|... messages are no acknowledges and therefore logged. Filtering saves considerable amount of memory for logging information exchange. The log file status will be shown as 'log filters'.



Returns to the Home page without affecting the log



starts an auto-update function.

The logfile is checked every few seconds for new messages which are appended automatically to the view. A click on another icon stops this again.

# **Reading Messages**

Each message is displayed with a time stamp, the direction the message was transmitted and, if applicable, its content both as hex dump and in clear text.

Four colors stand for the three main communication links:



# • Log Status

These entries show the status changes of the logging and the time when this state has been set. The first entry in the log is always such a status entry. It reflects the actual logging state (started / paused) and is the only entry with a timestamp out of order.



### PBX Messages

The PBX PMS protocol basically sends messages that start with a STX (code 02) and end with an ETX (code 03). The bytes in between are clear ASCII text. Messages have fields with fixed lengths. Numbers are represented as a string of digit characters which are padded to the right with spaces if they are to be dialed (room numbers) or padded to the left with 0's if they are values.

The first three characters of each message define the message type and thus the format of the message and its fields.

Each message is explicitly acknowledged with an ACK (code 06) character.

Occasionally, a Negative acknowledge (code 15) is sent when the packet has been received but the action cannot be performed.

For full details consult the PBX PMS protocol description.



# · Fidelio Messages

The FIAS protocol also sends messages that start with STX (02) and end with ETX (03) with ASCII characters in between, but the message format is different. Each message consists of a sequence of fields that can have variable length and all are terminated with a | character. The first two characters of a field are its name and define the format. The message type is defined by the first field which never has more than two characters. The following fields may be sent in any order.

For a detailed description, consult the FIAS specification 2.11.

An example is displayed below



# · SMDR data records

received from the PBX or sent to the SMDR client, contain the call details and call charge data. The PMSU reads them form the PBX and worksas a relay for other call accounting software which can connect to the PMSU to retrieve the SMDR data.

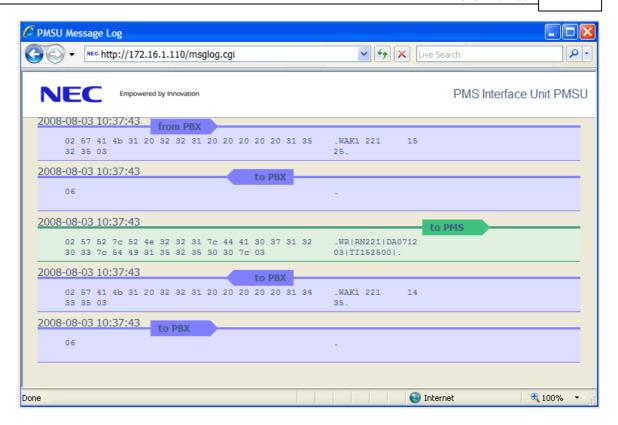
The SMDR data are not altered by the PMSU, especially not the charging information,



# • UM8000 Messages

Between PMSU and UM8000 voicemail system, messages are exchanged using the FIAS protocol. These control guest mailboxes, prompt languages and text and voicemail indications.

# **Example Message Log**



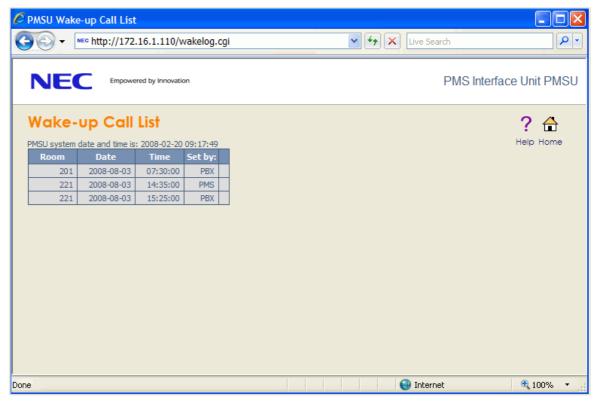
This shows how a wakeup call is set for 15:25 from PBX with a WAK1 message that is first acknowledged and then triggers a WR| message towards the PMS.

As the PMSU had in its buffers another wakeup call that has been set for an earlier time (14:35) before, this earlier call is then sent back to the PBX, which acknowledges the new call.



# **Checking Wake-up Calls**

From the home page click the Wakeup Call List icon; this will display a snapshot of the internal wakeup call buffer. It is possible to see from here the wakeup calls that are still pending.



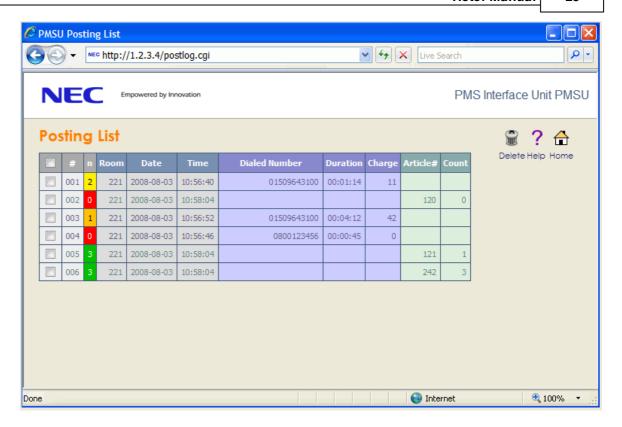


Opens the manual



Returns to the Home Page







Opens the manual



Returns to the Home Page



deletes the marked postings

The PMSU keeps in a buffer all postings that shall be put to a room's bill. A posting is a booking record containing a call or minibar article to be charged to the rooms bill.

From the buffer, postings are sent sequentially towards the PMS. If the link is down, or the PMS does not accept the postings, these postings stay in the buffer and are listed here.

A table with four column groups is displayed.

# Light grey

columns are posting sequence numbers and remaining number of retries to send the posting to the Fidelio PMS.

# Grey

columns contain common data for all postings.

# Bluish

columns contain data for call charges only.

# Greenish

columns contain minibar data.

The Retry count field 'n' changes colour to indicate the amount of retries made.

### Green

3 attempts remaining. The record has not yet been sent

#### Yellow

2 attempts remaining. The record has been sent once, but not yet acknowledged

## Orange

1 attempt remaining

### Red

retry count exceeded. PMSU gave up resending.

This happens according to Fidelio specification after 3 tries to send it, which takes 30 seconds when the link is up. When the link to the PMS is down, no tries are made and the time does not expire.

Postings for a room are removed from this list on guest check-in or when a proper message for this posting has been received from Fidelio.

You can from this screen manually delete postings if you tick the checkbox and click on the Delete Button above the table. A click on the checkbox in the table header selects or unselects all checkboxes.

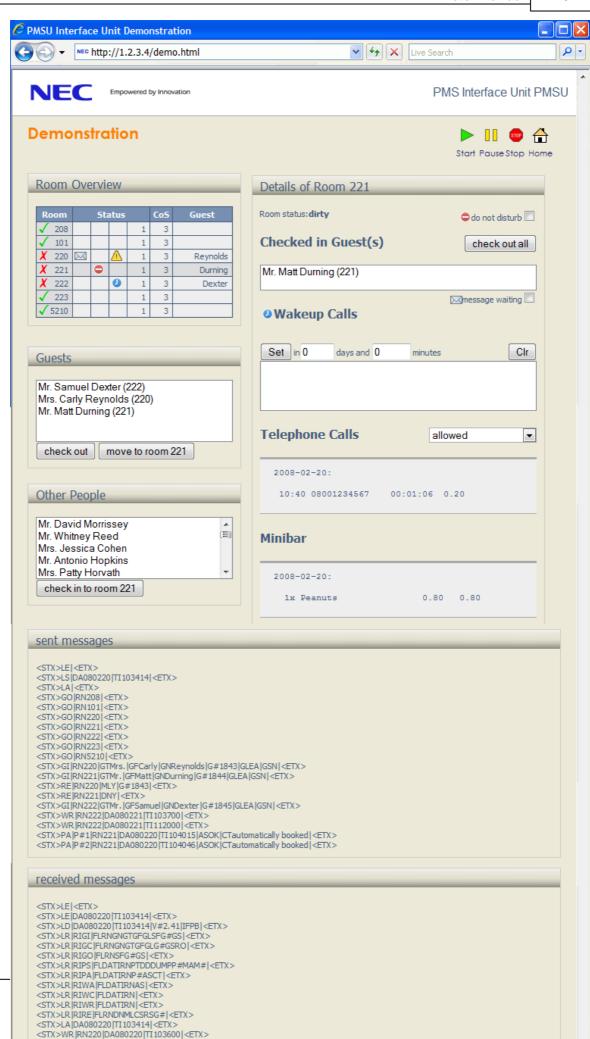


# **Demonstrating the PMSU Functions**

The PMSU has a built-in demonstration feature, which allows to show the features and functionality of the PMSU. It is enabled when the PMS IP address is set to 127.0.0.1 in the configuration page. It can be accessed by clicking on Demonstration icon in the home page.

This loads an AJAX application into the browser which periodically polls the message queue for the Fidelio PMS and updates the local room and guest data.

Postings are automatically acknowledged.



<STX>WAIRN220 | DA080220 | TI 103600 | ASNR | <ETX>

## Operation

The Demonstration Tool starts automatically after loading. You can stop and restart it by using the buttons:



Starts periodic polling again



halts or starts the FIAS protocol to the PMSU



stops the demonstration



returns to Home page.

You will have to configure the PMS IP address to be 127.0.0.1 and to restart the PMSU firmware to enable the demonstration feature.

On the first PMS link establishment, the PMSU retrieves the room database from the Aspire system. About one minute later, the PMSU database synchronisation is complete and the room list is retrieved by the demonstration tool.

After that it automatically checks out all hotel rooms and fills the room overview table.

Now you can start playing. Note that all actions are handled in real-time. No additional confirmation is needed. Also you can see that each room keeps its own status and data.

# Description of the screen layout

### Room overview

This table contains for each room a row with an room status overview.

Clicking on a row selects the room for further actions and shows its details on the right side.

Left to the room number a green OK sign shows that the room is vacant; i.e. has no guests. A red cross indicates that the room is occupied.

In the second column the message status is shown. If a guest within this room has a message, an envelope symbol is shown.

Next is the Do-Not-Disturb status. If it is set for a room, a 'do-not-enter' traffic sign is shown.

In the third column pending wakeup calls are indicated with a clock symbol; missed wakeup calls show up with a warning sign.

The next column gives an indication for the maid status of the room (1...6), Followed by the dial restriction class of that room.

The last column contains the name of the guest as it is sent to the PBX.

### Guests

This is the list of people that have been checkin in to a room. The room number is shown in brackets. Clicking on the guest selects it and automatically selects the room he/she is checked in. The selected guest can be checked out or moved to another room after that has been selected in the room overview table.

## Other People

These predefined list of names are yet checked in. You can check in the selected person to the selected room with a click on the button check-in.

### Room Details

In the room details, you can see the room's cleaning status and the Do-not-Disturb status, which also can

be changed. Next, there is the list of guests that are check in to that room. After having selected a guest, you can change its message status, which in turn affects the message lamp of the room telephone. Below the guest list there is the list of wakeup calls that have been set for the room. Missed calls are marked in bright yellow. Calls can be cleared and new calls set from the room's phone, the front desk phone or from the demonstration tool. For speed, in the demonstration tool the target time is entered as a time from now, not an absolute time.

At the list of telephone calls you can select the restriction class for the room. Also you will get a list of calls which have been made from the rooms's phone.

Below that a similar list exists for the minibar consumptions which can be entered at the room's phone with a a service code. The minibar articles and its prices are predefined.

# Sent and Received messages

Here you can see and show that all communication is handled with original FIAS messages and you also can see what actually is transmitted to perform an action.

# 1.3 Hotel - PMSU Interface Configuration

# **Hotel - PMSU Interface Connection**

# **PMSU Overview**

The PMSU interface is a physical unit that sits between the PBX and a PC containing 'Front of House' Hotel software in order to translate the hotel and SMDR information for the front of house software.

The PMSU has been designed to work to the Fidelio Interface Application Specification (FIAS) 2.11 and has been approved by Fidelio to work to this specification.

# Configuration

# **Physical Connections**

For the purposes of connection for PMS integration the PMSU requires the use of 3 connectors.

For connection of power the central green connector (connectors labelled AC) or jack plug connection is used. The PMSU will accept between 9V DC and 24V AC and has a power consumption of approx 3 watts.

The 2 ethernet connectors are labelled ETH0 and ETH1.

Eth1 has a fixed address of 1.2.3.4 and also contains an inbuilt DHCP server to aid in configuration purposes.

Eth0 is used for the general connection to the customers network and its IP address is configured via the web browser interface initially from Eth1.



# **PBX Configuration**

In addition to the other configuration settings required for hotel operation on the PBX, it is necessary to set specific programming commands for the PMS adapter to operate correctly in conjuction with the hotel operation.

# System IP Configuration

It is necessary to configure the IP address of the PBX for the PMS and SMDR connections.

This is achieved as follows:

- PRG10-12-01 set the IP address for the pbx system.
- PRG10-12-02 set the subnet mask for the pbx system.

# PMS Settings

In addition to the IP address the PMS interface requires configuration changes on the PBX in order to communicate successfully.

Although most of programming commands 42-06 and 42-08 may stay at default the settings are listed for reference:

- PRG42-06-01 set the system port for the PMS connection (the default is 5129).
- PRG42-06-02 3:00am AutoRoomScan all checked in rooms are automatically scanned at 3am and set as dirty.

Default = off, this should be left at default.

- PRG42-06-03 Check In Message Type

  Default = off, this should be set to on (1).
- PRG42-06-04 This defines the the room status when a check out is performed on the PBX.
   0 = off checkout (clean and available)
   1 = on checkout (dirty)
- **PRG42-06-05** AreYouThere this is the timer, in seconds, after very message that the system will wait and then send an 'AreYouThere' message to ensure network connection integrity.

  Default = 10 seconds.

- PRG42-06-06 AreYouThere retry count this is the amount of times the system will retry unacknowledged 'AreYouThere' messages.
  - If the message is unacknowledged after the specifed amount, the PBX states the PMS link is inoperational (off-line).
- PRG42-08-01 This is a translation table which converts the room state the maid enters (using service code 740, PRG11-14-14 or 741, PRG14-14-15) and the vacancy status (checked in (0) or out(1)) to a combined room status code and a describing clear text which is sent to the PMSU and finally to the Fidelio PMS.

This is a site specific setup and is set according to the customers own requirements.

# **SMDR Configuration**

The SMDR output should also be configured in order for the FMS adapter as per the following commands:

- **PRG35-04-01** Set an SMDR pattern for the station group the hotel room extensions are members of. Ideally, the hotel room extensions should be in their own extension group to prevent hotel rooms being able to dial unrequired extensions, see <a href="Department groups">Department groups</a> and also configure one digit dialling in PRG42-04.
- PRG35-01-01 output port type. For the SMDR pattern relating to the hotel extensions, this should be set to 'LAN'.
- PRG10-20-01 for Ex-device 5 the TCP port should be set to an available setting, e.g. 4000.
- **PRG35-02** SMDR settings the majority of this command can be left at default, the only changes that are specifically required to be changed are as follows:
- PRG35-02-07 Cost charging this should be set to 1:Output.
- PRG35-02-09 Extension Number/Name this should be set to 1:Number.

### Additional Hotel commands

In addition to the normal hotel commands, e.g. PRG42-02 (Hotel telephone), PRG42-03 (Hotel class of service setup) etc. see Hotel - system setup, additional service codes are available

- PRG11-14-18 Set hotel PMS Toll restriction default = 766
- **PRG11-14-19** Hotel room data default = 781. For 'minibar' charging from a room, dial 781, item code, hold, quantity, hold.

## **Operator Telephone**

It is important that an operator extension is set for the PBX, this is typically the Front of House receptionist. This is configured by the following command:

· PRG20-17-01 - Operator's extension

### **PMS Web Interface**

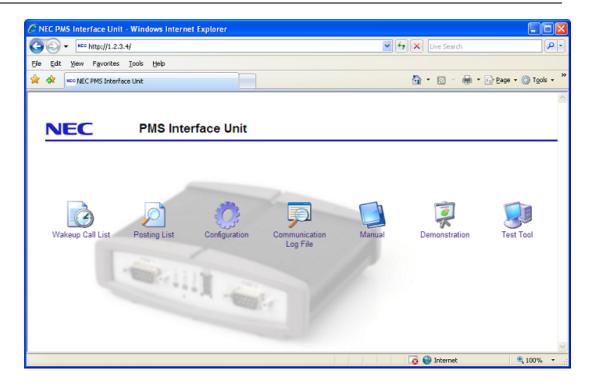
In order to configure the adapter it is necessary to connect a DHCP enabled laptop to connector eth1 and enter address http://1.2.3.4 into the browser.

The IP address for connector eth1 is fixed and cannot be changed, the IP address for connector eth0 is changeable and is described below.

A 'pop-up' box will appear requesting the user name and password - the following should be entered:

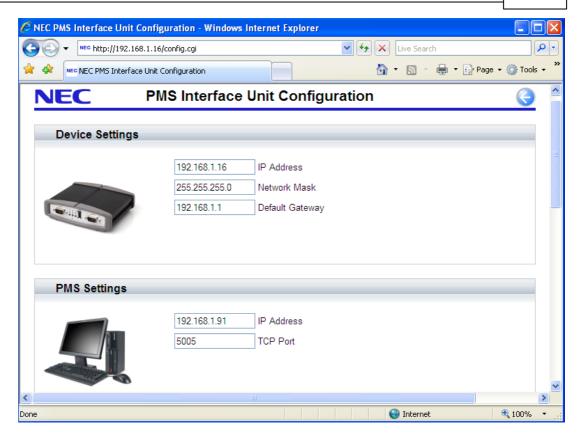
User name = admin Password = nec-pmsu

A screen will be presented similar to below:



# PMS Interface Unit (PMSU) Configuration

To configure the unit click on the configuration icon, This will bring up the configuration screen.



From this screen it is possible to configure all the necessary settings for the PMS adapter to operate successfully with the PBX and PC containing FIAS 2.11 compliant Front of House software. It will probably be necessary to consult with the customers IT department in order to configure the following settings.

# **Device Settings**

These are the settings specific to the PMS interface adapter relating to connector eth0. **IP Address** - this is the IP address of the PMS Interface adapter. A suitable available static IP address should be entered.

**Network Mask** - this is the network mask relating to the PMS interface adapter. **Default Gateway** - this is the IP address of the default gateway.

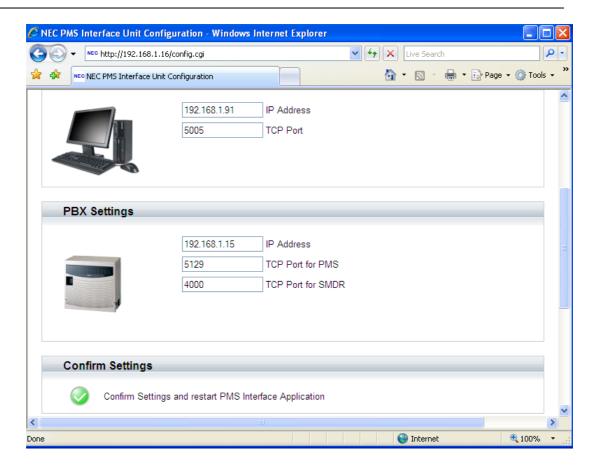
# **PMS Settings**

These are the settings relating to the customers PC containing the Fidelio, or equivalent, Front of House hotel software.

IP Address - this is the IP address of the PC containing the Front Of House software.

**TCP Port** - this is the TCP port configured on the PC for the PMS information.

Scroll down and additional settings are revealed as shown below:



# **PBX Settings**

These are the settings relating to the PBX.

IP Address - this is the IP address on the PBX, as set in PRG10-12-01.

**TCP Port for PMS** - this is the TCP port on the PBX configured for PMS information, as set in PRG42-06-01.

**TCP Port for SMDR** - this is the TCP port on the PBX configured for SMDR information, as set in PRG10-20-01 ex-device 5.

When the above settings are configured correctly they are applied by selecting the OK button



The configuration page checks the IP addresses and TCP Ports for syntax, consistency and legal values

Each IP address must consist of exactly 4 integer numbers in the range 0 to 255 seperated by a dot, the gateway IP address must be in the same network as the PMS adapter, the network mask must be a legal one, etc

Any entry found to be 'faulty', is marked in red, if no error is found the above settings will be written to the configuration and restart the PMSU interface application (not the complete box).

It is necessary for the Front Of House software to be running in order for the PMS interface to attempt to establish a connection with the PBX.

# **PMSU Call Charge Calculation**

The PMSU software includes a module that calculates for each call a minimum charge based on call duration and dialled number. The number is checked against a set of records one by one in an internal database, starting at the top. If it matches, i.e. if it begins with the digits in the record, this record is selected to provide a charging interval length, a charge per interval, and a surplus charge per call.

The call duration is divided by the charging interval length and the resulting interval count is then multiplied by the charge per interval. Finally the surplus charge is added and the result converted to meter pulses by dividing by the common scale factor. All division results are rounded up to the next integer before using the result.

If the so calculated meter pulse count is higher than the meter pulse count provided by the network, the calculated count is used, otherwise the count provided by the network is used. This provides a fallback in case that the network does not provide call charges and keeps the capability to receive and use special (probably very high) charges for premium rate calls.

# **Database Configuration**

From the configuration screen, scroll to near bottom of the page. in the text edit box, you can edit the tariff database file as plain text.

The first line contains the common scale factor to gain the meter pulse count from the call charge units.

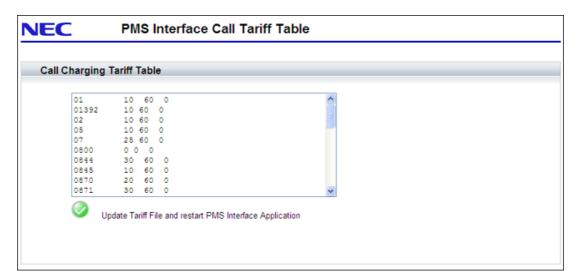
The next lines contain each a digit sequence and three integer numbers.

The first is the call charge per interval, the second is the interval length in seconds, the third number is the surplus charge per call.

An interval length of 0 is valid and indicates that no charges based on call duration apply. the numbers are separated by spaces or tabulators; nothing else.

Text may be entered behind the last number as comment; this will be stored on the PMSU as well. The text can be copied and pasted from and to the text box to export and import a file.

To confirm the changes and write the file back to the PMSU, click on the green button. This will also restart the PMS application to reread the file.



# **Troubleshooting**

The PMSU interface contains tools to aid in the trouble shooting process.

### **PBX Protocol**

The protocol basically sends messages that start with a STX (code 02) and end with an ETX (code 03). The bytes in between are clear ASCII text. Messages have fields with fixed lengths. Numbers are represented as a string of digit characters which are padded to the right with spaces if they are to be dialed (room numbers) or padded to the left with 0's if they are values. The first three characters of each message define the message type and thus the format of the message and its fields. Each message is explicitly acknowledged with an ACK (code 06) character.

Occasionally, a Negative acknowledge (code 15) is sent when the packet has been received but the action cannot be performed.

For full details consult the PBX PMS protocol description.

### Fidelio Protocol

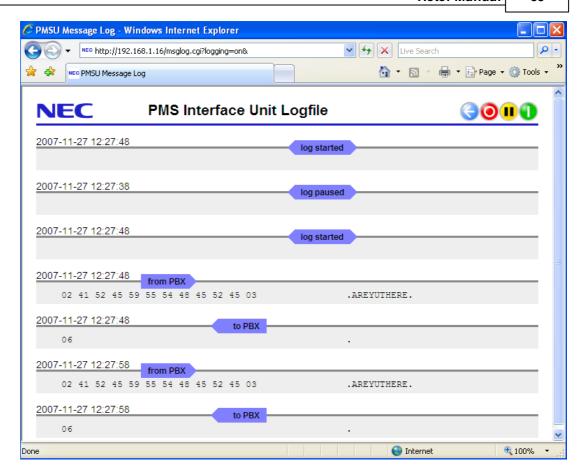
The FIAS protocol also sends messages that start with STX (02) and end with ETX (03) with ASCII characters in between, but the message format is different. Each message consists of a sequence of fields that can have variable length and all are terminated with a | character. The first two characters of a field are its name and define the format. The message type is defined by the first field which never has more than two characters. The following fields may be sent in any order. For a detailed description, consult the FIAS specification 2.11.

### **Built in communications log**

The PMSU interface has a built-in message log, which records each sent and received message, which is viewed with a web browser.

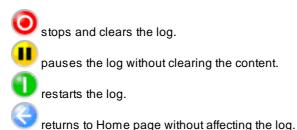


To access the log click on the 'Communications Log' icon from the home page



Each message is displayed with a time stamp, the direction the message was transmitted and, if applicable, its content both as hex dump and in clear text.

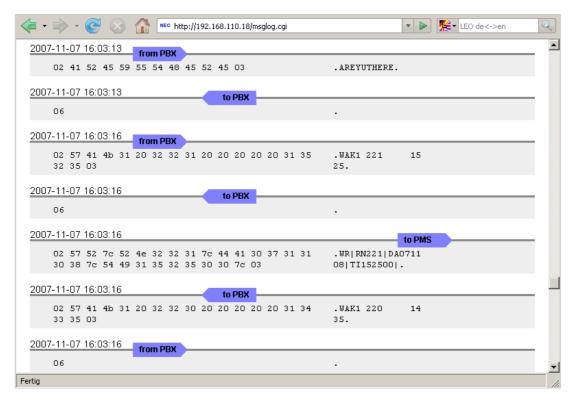
Here we see the keepalive messages from the PBX. As these fill up the log quite fast, it is possible to pause, start and clear the logging with the coloured buttons at the top right:



The first entry in the log reflects the actual logging state (started / paused) it shows the time when this state has been set.

The triple sequence in the example above results from clearing and stopping the log which puts a 'log paused', followed by a start logging, which adds the 'log started'.

A more interesting example is displayed below:

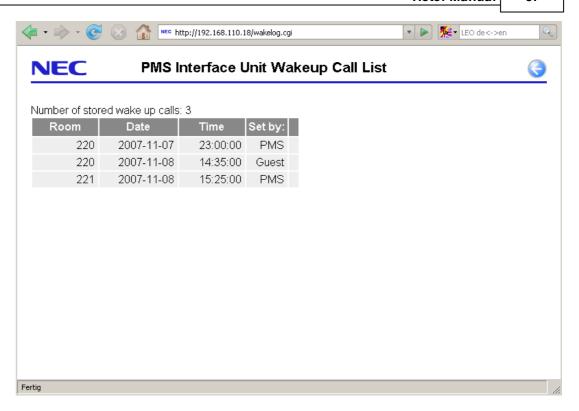


This shows how a wakeup call is set for 15:25 from PBX with a WAK1 message that is first acknowledged and then triggers a WR| message towards the PMS.

As the PMSU had in its buffers another wakeup call that has been set for an earlier time (14:35) before, this earlier call is then sent back to the PBX, which acknowledges the new call.

# Wake Up Call List

From the home page select the Wakeup Call List icon, this will display a snapshot of the internal wakeup call buffer.



It is possible to see from here the wakeup calls that are still pending.

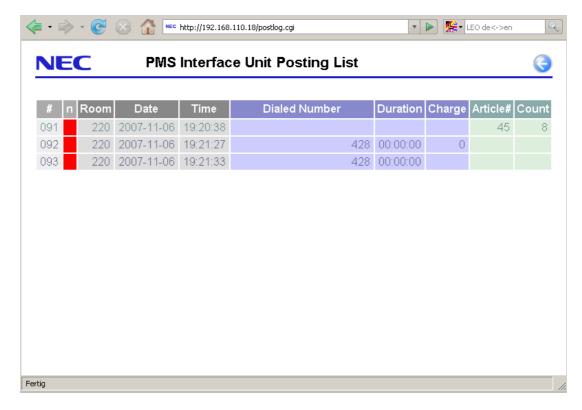
### **Posting List**

Hopefully never needed, this displays a list of unacknowledged postings.

A posting is a booking record containing a call or minibar article to be charged to the rooms bill.

To access the Postings List select the Postings List icon from the Home page





A table with four column groups is displayed.

Light grey columns are posting sequence numbers and remaining number of retries to send the posting to the Fidelio PMS.

Grey columns contain common data for all postings.

Bluish columns contain data for call charges only.

Greenish columns contain minibar data.

The Retry count field 'n' changes colour to indicate the amount of retries made.

Yellow = 2 attempts remaining

Orange = 1 attempt remaining

Red = retry count exceeded. PMSU gave up resending.

This happens according to Fidelio specification after 3 tries to send it, which takes 30 seconds when the link is up. When the link to the PMS is down, no tries are made and the time does not expire.

Postings are removed from this list on guest check-in or when a proper message for this posting has been received from Fidelio.

### **PMSU Software Upgrade**

The software installed on the PMSU adapter is easily upgradeable using a web browser interface. It will be necessary to default the unit after the upgrade therefore the customer's configuration settings should be noted.

From the configuration screen, scroll to the bottom of the page.

NEC	PMS Interface Unit Maintenance
Device Firm	ware
	The firmware version is: 2.21. To upgrade to a newer firmware, select a new firmware file  Browse and press Upgrade  Note: Do not reset or disconnect power during upgrade. The unit restarts automatically after upgrade is completed.

Using the 'Browse' button, navigate to, and select the upgrade file. This will be a flash file typically named 'fimage'.

Click the 'Upgrade' button and the web browser will display activity relating to the software upgrade.

When complete the PMSU will reboot itself.

After the reboot the unit should be defaulted.

This is achieved by the following method:

- .1.Remove power from the unit
- .2.Locate the small hole below the ETH0 LED.

Insert a paper clip, or similar, carefully into the hole and press and hold the switch behind.

- .3.Restore power whilst maintaining pressure on the switch.
- .4. After, approx, 10 seconds remove clip from hole.

When the unit reboots it will have default settings applied, the customer's settings should then be reset.

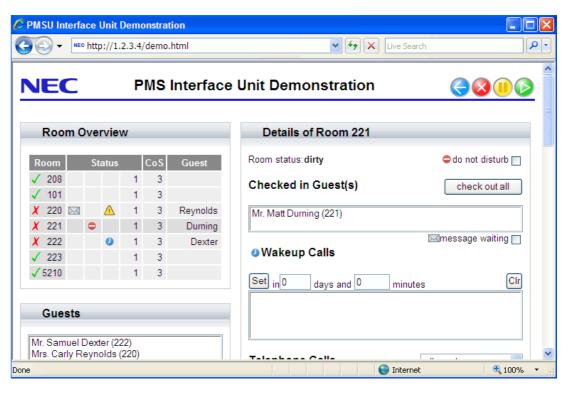
### **Demonstration**

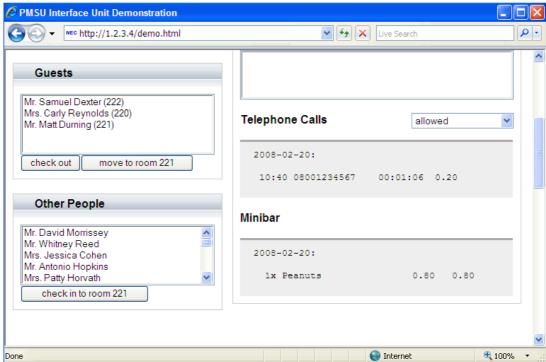
The PMSU has a built-in demonstration feature, which allows to show the features and functionality of the PMSU.

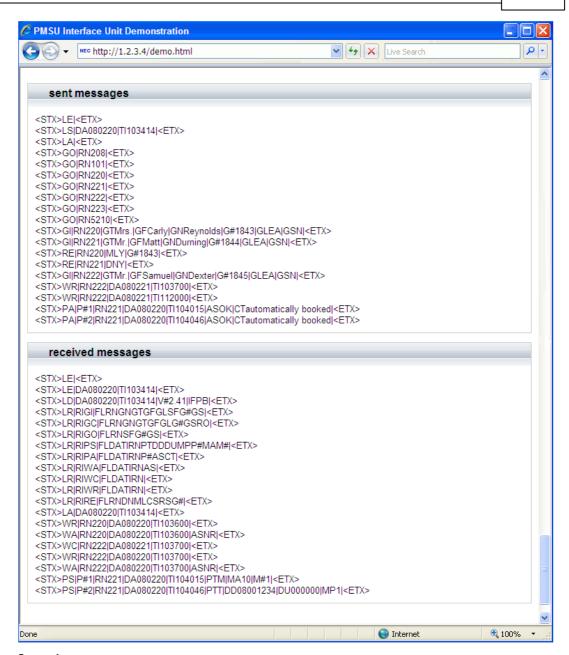
It is enabled when the PMS IP address is set to 127.0.0.1 in the configuration page.

It can be accessed by clicking on Demonstration icon in the home page.

This loads an AJAX application into the browser which periodically polls the message queue for the Fidelio PMS and updates the local room and guest data. Postings are automatically acknowledged.







## Operation

The Demonstration Tool starts automatically after loading. You can stop and restart it by using the buttons:



stops the demonstration



halts or starts the FIAS protocol to the PMSU



starts the periodic polling again



returns to Home page.

On the first PMS link establishment, the PMSU retrieves the room database from the PBX system. About one minute later, the PMSU database synchronisation is complete and the room list is retrieved by the demonstration tool. After that it automatically checks out all hotel rooms and fills the room overview table.

Now you can start playing.

Note that all actions are handled in real-time.

No additional confirmation is needed. Also you can see that each room keeps its own status and data

#### Description of the screen layout

#### Room overview

This table contains for each room a row with an room status overview.

Clicking on a row selects the room for further actions and shows its details on the right side. Left to the room number a green OK sign shows that the room is vacant; i.e. has no guests. A redcross indicates that the room is occupied.

In the second column the message status is shown. If a guest within this room has a message, an envelope symbol is shown.

 $Next is the \ Do-Not-Disturb\ status.\ If it is\ set for\ a\ room,\ a\ 'do-not-enter'\ traffic\ sign\ is\ shown.$ 

In the third column pending wakeup calls are indicated with a clocksymbol; missed wakeup calls show up with a warning sign.

The next column gives an indication for the maid status of the room (1...6),

Followed by the dial restriction class of that room.

The last column contains the name of the guest as it is sent to the PBX.

#### Guests

This is the list of people that have been checkin in to a room. The room number is shown in brackets. Clicking on the guest selects it and automatically selects the room he/she is checked in. The selected guest can be checked out or moved to another room after that has been selected in the room overview table.

#### Other People

These predefined list of names are yet checked in. You can check in the selected person to the selected room with a click on the button check-in.

#### Room Details

In the room details, you can see the room's cleaning status and the Do-not-Disturb status, which also can be changed. Next, there is the list of guests that are check in to that room. After having selected a guest, you can change its message status, which in turn affects the message lamp of the room telephone. Below the guest list there is the list of wakeup calls that have been set for the room. Missed calls are marked in bright yellow. Calls can be cleared and new calls set from the room's phone, the front desk phone or from the demonstration tool. For speed, in the demonstration tool the target time is entered as a time from now, not an absolute time.

At the list of telephone calls you can select the restriction class for the room. Also you will get a list of calls which have been made from the rooms's phone.

Below that a similar list exists for the minibar consumptions which can be entered at the room's phone with a a service code. The minibar articles and its prices are predefined.

## Sent and Received messages

Here you can see and show that all communication is handled with original FIAS messages and you also can see what actually is transmitted to perform an action.

#### **Test Tool**

The PMSU has a built-in Fidelio simulation feature, which allows to test the PMSU, the PBX settings

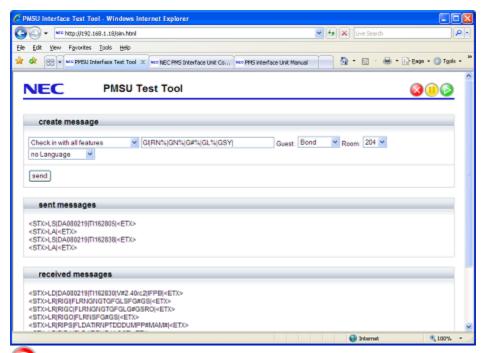
and the link integrity. It is enabled when the PMS IP address is set to 127.0.0.1 in the configuration page.

It can be accessed by clicking on Test Tool icon in the home page.

This loads a small AJAX application into the browser which, after the start button has been pressed, periodically polls the message queue for the Fidelio PMS and displays the messages on the screen.

Postings are automatically acknowledged.

To send own messages, one can select one of the predefined messages, set the parameters and then click on the send button. Alternatively, one can enter or modify the message content directly before sending.



stops the simulator

sends a LE / LA message to the PMSU to close / re-open the link

starts the periodic polling

On the first PMS link establishment, the PMSU retrieves the room database from the PBX system. About one minute later, the PMSU database synchronisation is complete and the room list is retrieved for the parameter dropdown box.

## Tips for the Installers

#### PMSU is quest based

The PMSU provides a guest based method for checking in or out guests as well as message indications. Room-based features like Do-not-disturb and dial restrictions are spread to all guests within that room. Some Versions of Opera or Fidelio send a room based feature with a reservation number; the reservation number will be ignored in these cases as agreed with the micros development team.

#### Features move with guests

If guests later move in or out, the effective setting for the rooms may change. A room always gets the most restrictive dial restriction of all guests. This applies especially for restricted guests moving into until then unrestricted rooms. A Do-not-disturb status of a room is not changed when guests are joining or leaving guests in a room.

#### Wakeup calls

It is possible to set multiple wakeup calls per room, for one or several days. A guest may only cancel the wakeup calls, he/she has set. The last guest leaving a room takes his/her wakeup calls to the new room.

#### Message Lamp

The guests message waiting lamp status always follows the guest during room moves. The PBX cannot change this state if it has been set by the PMS.

### Time synchronisation

The PMSU synchronises itself to the time and date it retrieves from DA and TI fields in LA, LS, and LE messages from the Fidelio PMS. The PBX is not synchronised and its time will differ from that of the PMS. The PMSU compensates this by maintaining a time offset range between PBX time and PMS time. This offset is adjusted when the PBX reports the result of wakeup calls.

It is a good idea to have once after installation a wakeup call expire to initialise the PBX time offset compensation.

### Tips for the Fidelio Engineer

Use the VRSF.

## 1.4 Hotel - NEC PMS Lite Installation Guide

# Hotel - NEC PMS Lite Installation/Configuration Guide

## **NEC PMS Lite Overview**

The NEC PMS Lite is a simple to use, fully integrated Hotel management software package that can be deployed as a standalone or network based application.

Designed with the hotelier in mind, it is ideally suited to the Guest house through to smaller hotel market up to 75 Bedrooms.

The core platform gives the hotelier the ability to manage all of the usual "Front Office" duties efficiently and accurately whilst leaving the reception team to deal with the Guest's real needs & requirements.

Fully interfaced to the SV8100, the NEC PMS Lite solution brings a new dimension to Integration within the smaller properties.

Using a single application, to not only manage the front of house, but to automate many of the manual processes that have been historically been prone to human error and consequently an unfortunate loss of revenue.

## **Hospitality Features**

The PMS Lite enables the can be used to check guests in and out, make reservations, set message waiting and wake up calls etc.

When a check-in/out or room status change is made the change is automatically sent to the SV8100 to update the status on the hotel room telephone or telephones.

## **SV8100 Configuration**

In addition to the other configuration settings required for hotel operation on the PBX, it is necessary to set specific programming commands for the PMS adapter to operate correctly in conjuction with the hotel operation.

### System IP Configuration

It is necessary to configure the IP address of the PBX for the PMS and SMDR connections.

This is achieved as follows:

- PRG10-12-01 IP address for the pbx system.
- PRG10-12-02 subnet mask for the pbx system.

If neccesary, the IP address of the IPL daughter board can be used instead of the CCPU IP address.

- PRG10-12-09 IP address for the IPL daughter board.
- PRG10-12-10 subnet mask for the IPL daughter board.

#### PMS Settings

In addition to the IP address the PMS interface requires configuration changes on the PBX in order to communicate successfully.

Although most of programming commands 42-06 and 42-08 may stay at default the settings are listed for reference:

- PRG42-06-01 set the system port for the PMS connection (the default is 5129).
- PRG42-06-02 3:00am AutoRoomScan all checked in rooms are automatically scanned at 3am and set as dirty.

Default = off, this can be left at default.

- PRG42-06-03 Check In Message Type
  - Default = off, this can be left at default.
- PRG42-06-04 This defines the the room status when a check out is performed on the PBX.

0 = off - checkout (clean and available)

1 = on - checkout (dirty)

- **PRG42-06-05** AreYouThere this is the timer, in seconds, after very message that the system will wait and then send an 'AreYouThere' message to ensure network connection integrity.
  - Default = 10 seconds.
- PRG42-06-06 AreYouThere retry count this is the amount of times the system will retry unacknowledged 'AreYouThere' messages.

If the message is unacknowledged after the specifed amount, the PBX states the PMS link is inoperational (off-line).

• **PRG42-08-01** - This is a translation table which converts the room state the maid enters (using service code 740, PRG11-14-14 or 741, PRG14-14-15) and the vacancy status (checked in (0) or out(1)) to a combined room status code and a describing clear text which is sent to the PMSU and finally to the Fidelio PMS.

This is a site specific setup and is set according to the customers own requirements.

## **SMDR Configuration**

The SMDR output should also be configured for the PMS adapter as per the following commands:

- **PRG35-04-01** Set an SMDR pattern for the station group the hotel room extensions are members of. Ideally, the hotel room extensions should be in their own extension group to prevent hotel rooms being able to dial unrequired extensions, see <a href="Department groups">Department groups</a> and also configure one digit dialling in PRG42-04.
- **PRG35-01-01** output port type. For the SMDR pattern relating to the hotel extensions, this should be set to 'LAN'.
- **PRG10-20-01** for Ex-device 5 the TCP port should be set to an available setting, e.g. 4000.
- **PRG35-02** SMDR settings the majority of this command can be left at default, the only changes that are specifically required to be changed are as follows:
- PRG35-02-03 Trunk Number/Name this should be set to number.
- PRG35-02-07 Cost charging this should be set to 1:Output.
- PRG35-02-09 Extension Number/Name this should be set to 1:Number.
- **PRG14-01-01** Trunk Name the trunk name should be edited to meet the following format so that the letters are in capitals e.g LINE 001.

- PRG14-01-05 Trunk SMDR Print Out this should be set to printout for all installed trunk circuits.
- PRG15-01-03 Extension SMDR Printout this should be set to 'yes' for all required extensions.

#### Additional Hotel commands

In addition to the normal hotel commands, e.g. PRG42-02 (Hotel telephone), PRG42-03 (Hotel class of service setup) etc. see <u>Hotel - system setup</u>, additional service codes are available

- PRG11-14-18 Set hotel PMS Toll restriction default = 766
- **PRG11-14-19** Hotel room data default = 781. For 'minibar' charging from a room, dial 781, item code, hold, quantity, hold.

#### Operator Telephone

It is important that an operator extension is set for the PBX, this is typically the Front of House receptionist. This is configured by the following command:

• PRG20-17-01 - Operator's extension

### **NEC PMS Lite Installation**

Before installation is attempted, care should be taken to ensure that the minimum PC requirements are met.

The deployment of the NEC PMS LITE Application must be installed on a dedicated PC or Windows Server. The minimum PC hardware specification below must be adhered to:-

#### Operating Systems Used:

Microsoft Windows XP or 2003.

Windows XP

Systems installed with Windows XP are advised to load SP2.

Windows 2003

Systems installed with Windows 2003 are advised to load SP1 or Release 2 but not specifically required. Windows 7/2008 server

#### PC Specification

- Processor: Pentium 4: 2.2 Ghz + (Or Equiv.)
- Memory: 2GB
- Hard Disk Drive: 40 Gb
- Media CDROM
- Network Card: 10/100 baseT PCI
- Monitor. Optional resolution 1024 x 768

### Remote Access to the PC / Server

- Please supply internet access to ALL NEC PMS LITE Server/PC's. This will mean that we can deliver the most efficient installation and aftercare service.
- Some Antivirus products can cause problems with database access and system performance. Please consult with Tiger Communications plc prior to installation.

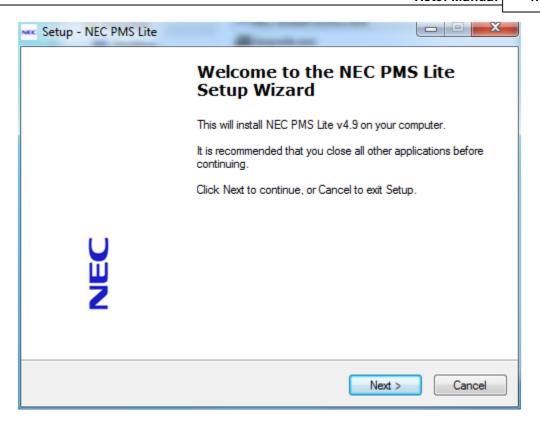
## You will need the customer to provide the following information...

- A list of all administration department names and extension numbers.
- A list of all guest room numbers (and conference room names..) and extensions.

#### Installation

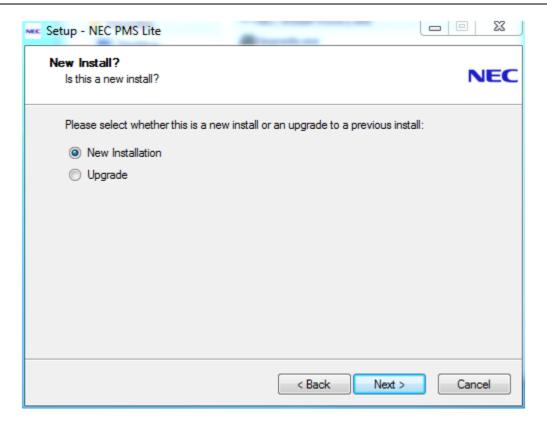
The installation software is available on CD or downloadable from BuisnessNet.

After double-clicking on the .exe file the following screen is displayed.
 Click 'Next'

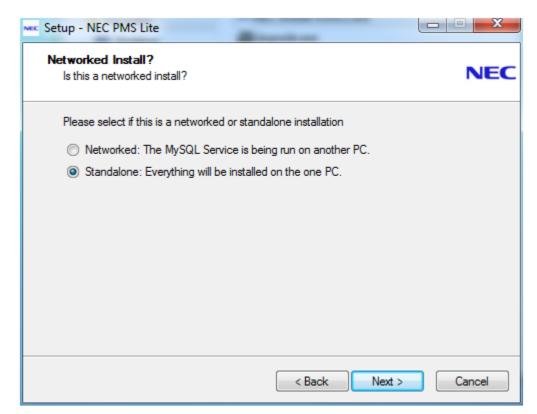


## 2. Click 'Next'

This page enables selection of either an upgrade or new installation. After making selection, click 'Next'

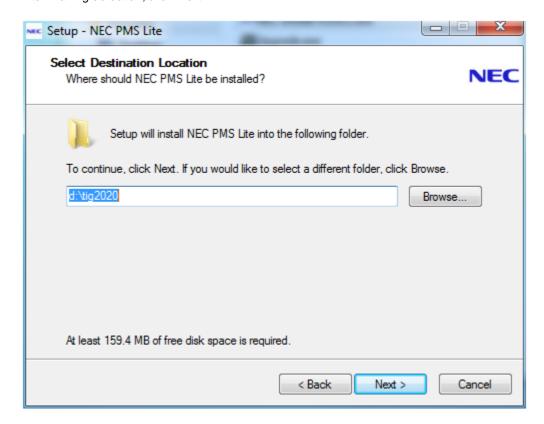


3. This page enables the selection of either a networked or standalone install. After making selection, click 'Next'

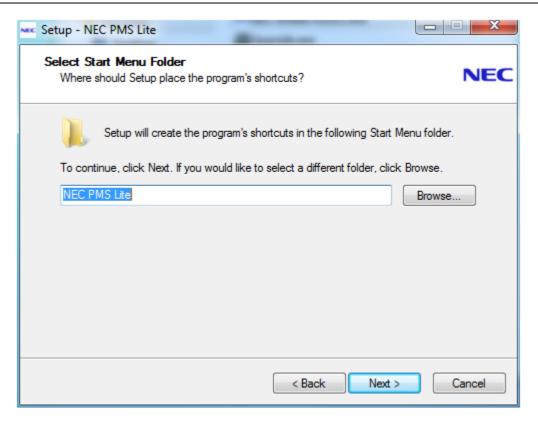


4. Select the location for the install. By default 'D:\Tig2020' is pre-entered, this should be suitable for most installs, however it may be necessary to change this to 'C:\Tig2020'.

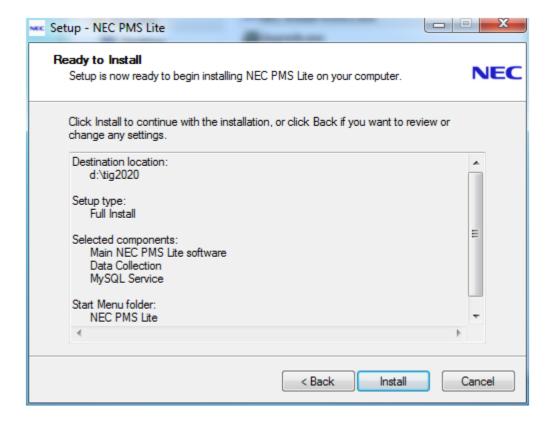
After making selection, click 'Next'



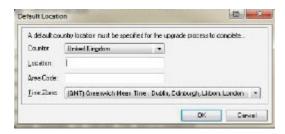
5. Enter the folder where Setup will place the program's shortcuts. After making the selection click 'Next'.



6. The install will give a detail of the files and locations that are to be installed. After confirming the selections are correct, click 'Install'.



#### 7. Insert location and local STD code



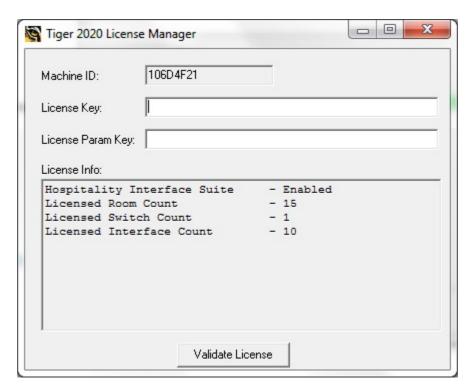
8. During installation the following page will pop-up.

This will necessitate the input of a license key obtainable from the Tiger Support Centre to validate your License Key.

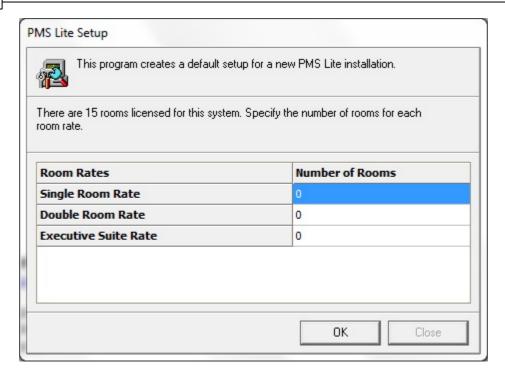
Please contact +44 1425 891000 or email installations@tigercomms.com

When the license key has been obtained, carefully copy the characters into the license key field and click 'Validate License'

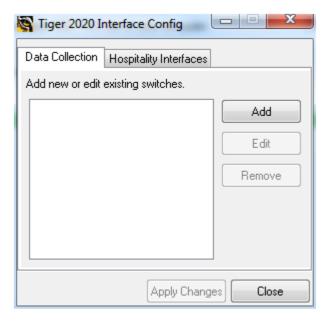
The License Info window will state whether the key has been accepted, if successful click the red X. The PMS Lite will continue its install.



9. Enter the required room types and press ok.

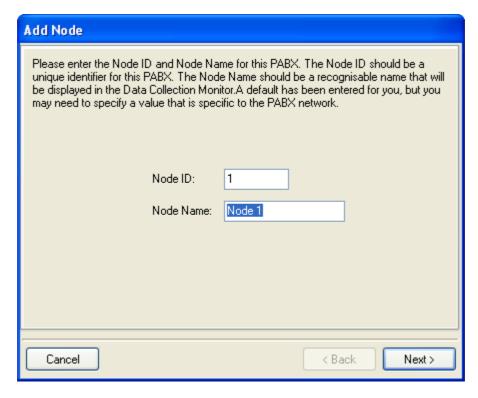


10. From the following screen the interfaces to the SV8100 are added and configured. From the 'Data Collection' tab select 'Add'.

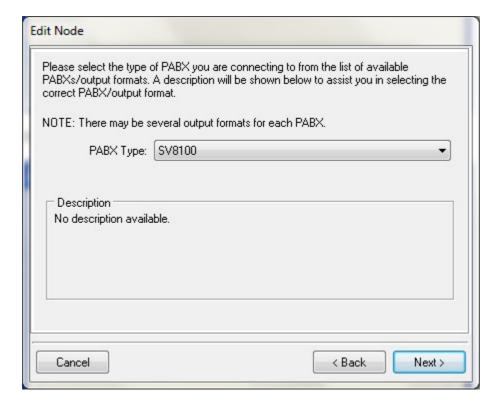


11.Enter the Node number 1 for the call logging interface and by pressing the TAB key on your keyboard the Node Name will auto-populate to 'Node 1'.

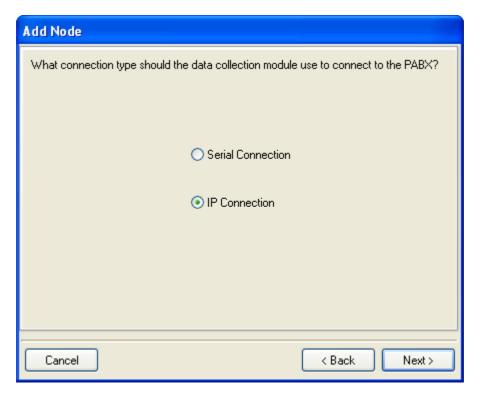
Press 'Next'



12. Select 'SV8100' from the drop down menu and click 'Next'.

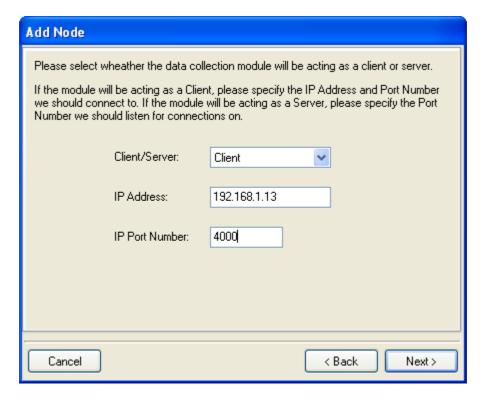


13.Select 'IP Connection' and click 'Next'.



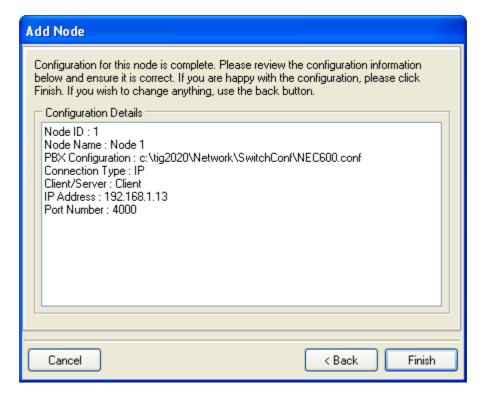
14.Select the 'Client' option and enter the IP address of the SV8100 system and the relevant call logging SMDR port number.

Click 'Next'

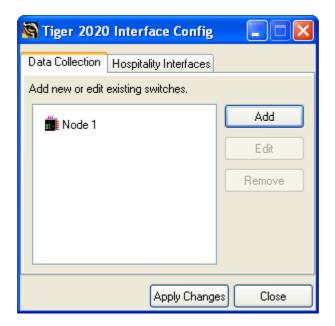


15.A window will appear detailing the entered information.

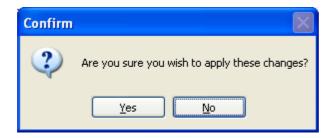
If correct, click 'Finish'.



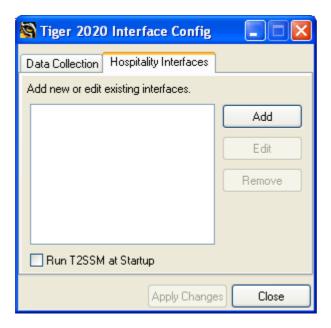
16.Click 'Apply Changes'



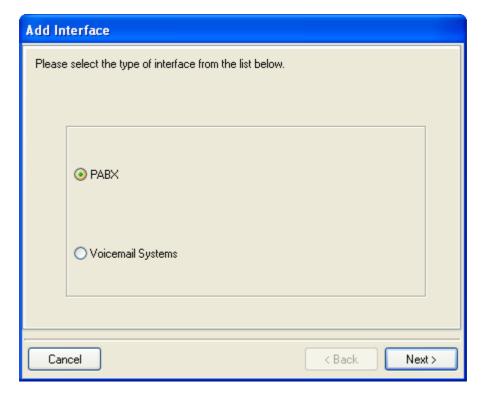
17.Click 'Yes' to confirm.



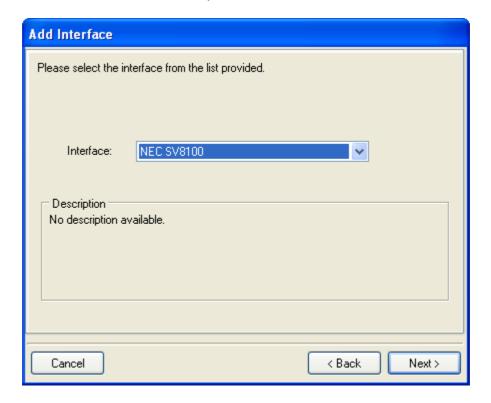
18. Select the 'Hospitality Interfaces' tab and click 'Add'.



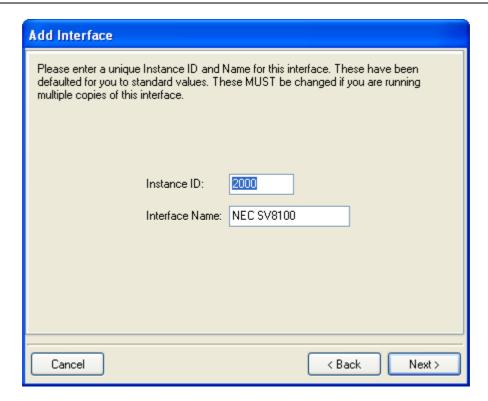
19.Select 'PABX' radio button and click 'Next'.



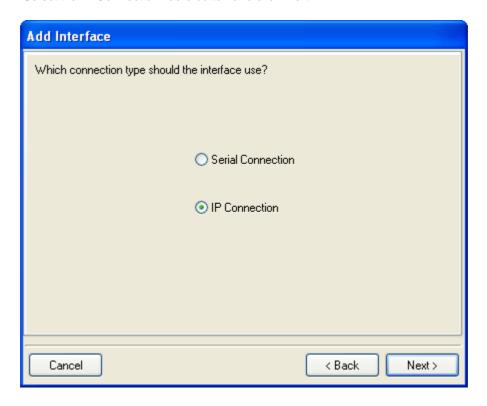
20. Select 'NEC SV8100' from the drop down list and click 'Next'.



21. Maintain the settings as detailed and click 'Next'.

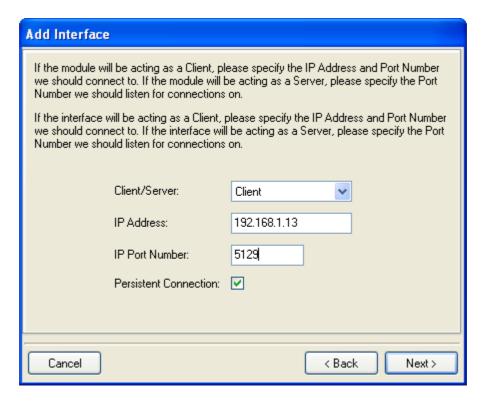


22. Select the 'IP Connection' radio button and click 'Next'.

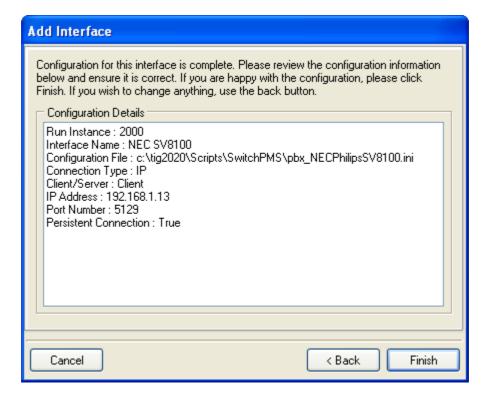


23. Select the 'Client' option and enter the IP address of the SV8100 and the relevant port number for the PMS connection (default 5129).

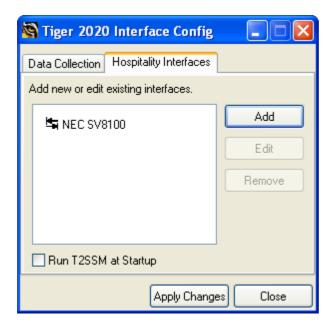
When complete click 'Next'.



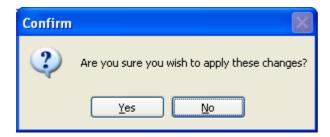
24. After confirming the details are correct within the window, select 'Finish'.



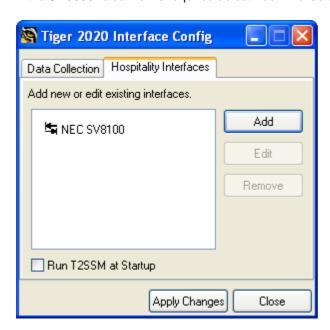
25. Click 'Apply Changes'.



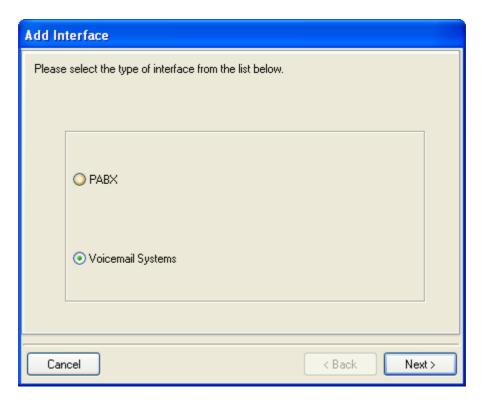
26.Click 'Yes' to confirm.



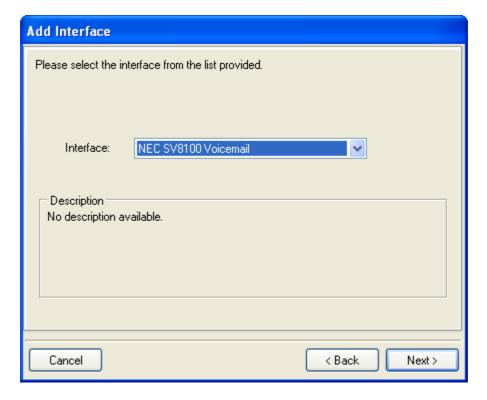
27.If the UM8000 voice mail is required select 'Add' if not select 'Close' and move to point 36.



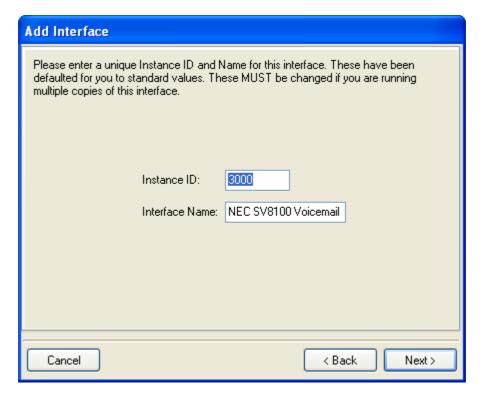
28. Select the 'Voicemail Systems' radio button and click 'Next'.



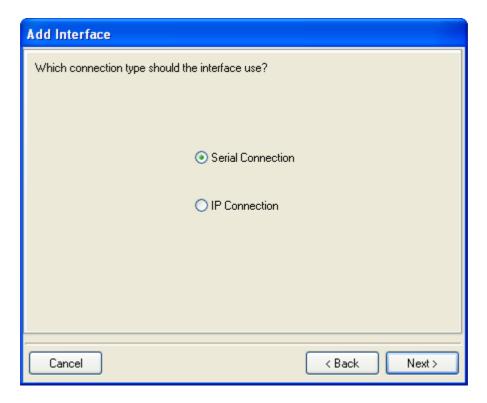
29. Select the 'NEC SV8100 Voicemail' from the drop down list and click 'Next'.



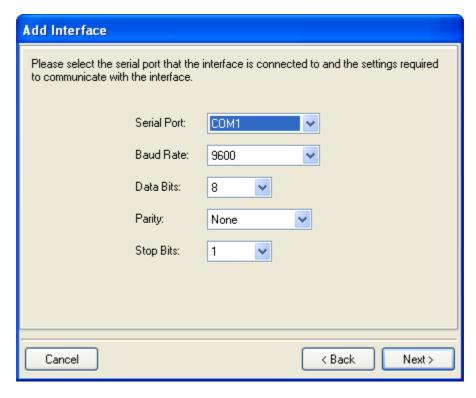
30. Maintain the displayed settings and click 'Next'.



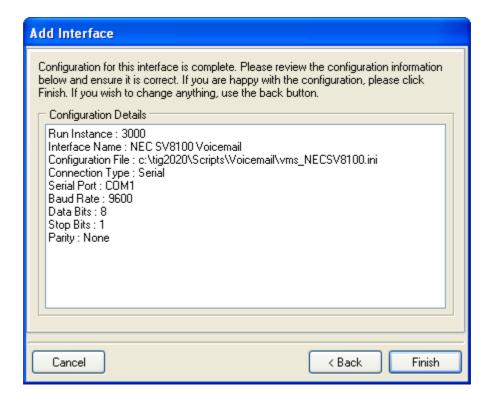
31.Select 'Serial Connection' and click 'Next'.



32. Select the correct Com port from the drop down menu and maintain the other displayed settings, as below, and click 'Next'.



33. After confirming the displayed settings click 'Next'.



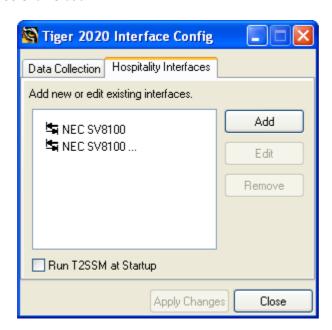
34. Select 'Apply changes'



35.Click 'Yes to confirm.



36.Click 'Close'.



37. The installer software will complete the installation of the PMS Lite and will finally display the screen

below. Click 'Finish'.

38. Click 'Next' to setup the carrier.



39. Click 'Next'



40. Browse to the required carrier file.



41. Click 'Next'



42. Select Country and click 'OK'

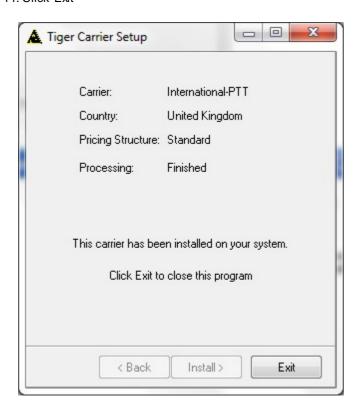


## 43. Click 'Install'.

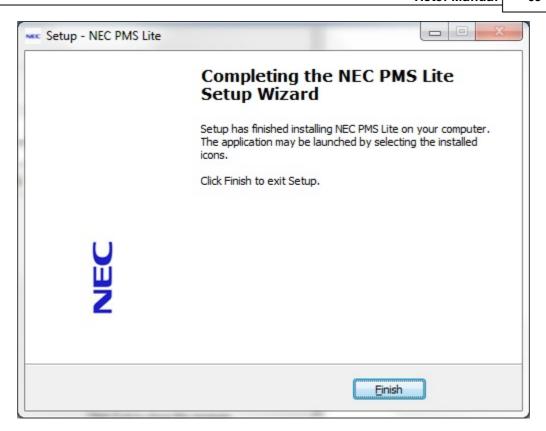
The install will take a few minutes to install the carrier tables.



### 44. Click 'Exit'



45. Click 'Finish'



The PMS Lite is now installed.

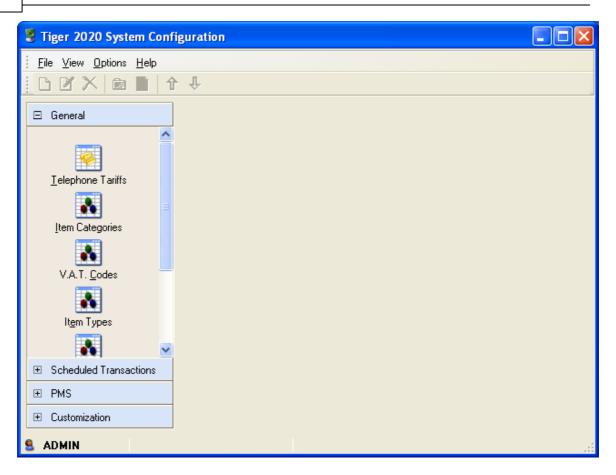
## **NEC PMS Lite Configuration**

### User ID's & Passwords

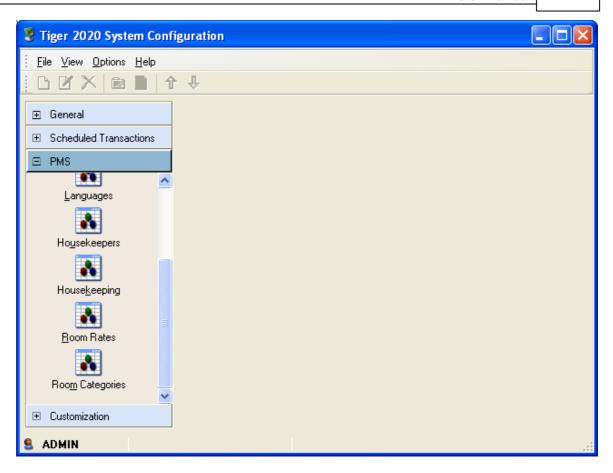
The default installation User Name is "Admin" and Password is "Tiger". To exit from any relevant module, the password is "regit"

### **Amend Room Numbers**

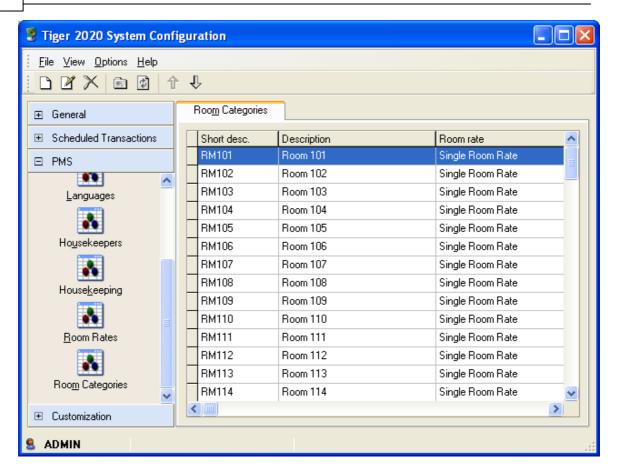
Once logged in, click on the "System Management" option and then "System Configuration"



Click on the PMS option at the bottom of the page



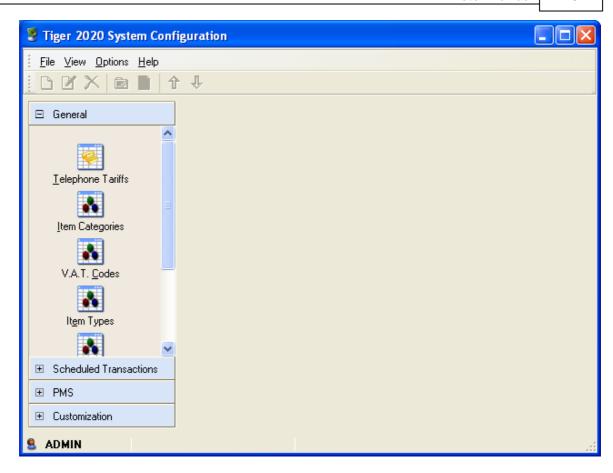
Click on the Room Categories option at the bottom of the page



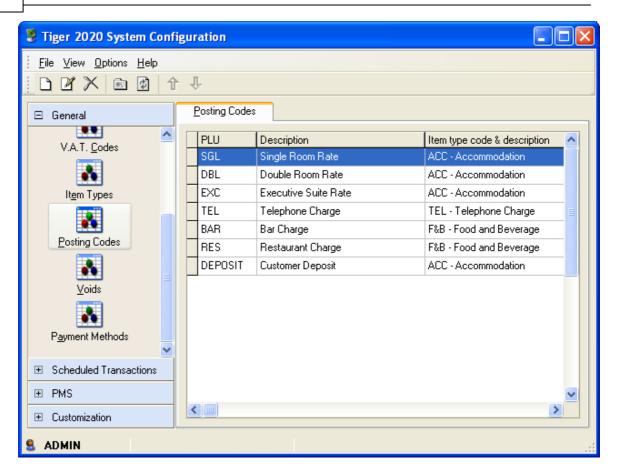
Double click the Room Number entries on the right pane and edit the Room Description. To enter a new room, 'right click' the window and select 'new'

### **Amend Posting Codes & Cost**

Once logged in, click on the "System Management" option and then "System Configuration".



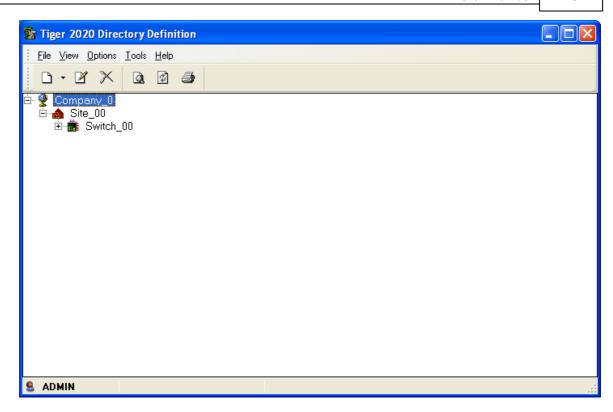
Click on the Posting Codes button on the left and amend codes & cost entries on the right pane



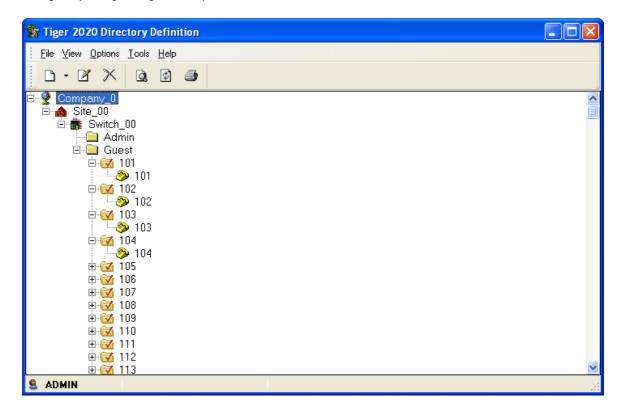
If a new posting code is required, 'right click' the window and select 'new'.

## Amend Room / Extension Mappings

Once logged in, click on the "System Management" option and then "Directory Definition"



Edit the Company, Site Location and Switch type by right clicking on each option and editing the properties. By opening each directory item [+symbol] this will allow complete visibility of the current setup and can be changed by using the right click options to amend.



## 1.5 Hotel - NEC PMS Lite User Guide

## **Hotel - NEC PMS Lite User Guide**

## **Getting Started**

The system is composed of several program modules.

Some of these program modules are background tasks that are started automatically when the PC is switched on.

The user must not close any of the program modules that are running in the background.

The following pages provide the user with information on the Key functions.

Please refer to your System Administrator for further details if required

## Starting the NEC PMS LITE

You can start the NEC PMS LITE module the same way you start any Windows-based application

Double-click the desktop shortcut icon for NEC PMS LITE

When the application starts up, you will see the System Status window

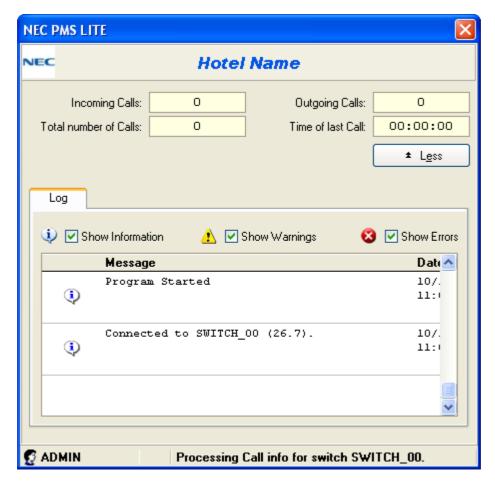


## **System Status**

The System Status window is the default display of NEC PMS LITE and provides an overview of the current status of the call logging module.

The **More** button provides additional information about pending events that the Hotel Interfaces must process.

If the More button is pressed the screen will change, as displayed below



#### **Basic Call Statistics**

- Incoming Calls: Total number of incoming calls received since midnight
- Outgoing Calls: Total number of outgoing calls made since midnight
- Total Number of Calls: Total number of calls since midnight including Incoming, Outgoing, Tandem and Internal
- Time of Last Call: Time of last Incoming or Outgoing call Additional Information
- Pending PIN events: The number of PIN events that are waiting to be set or cleared on the PBX
- Pending DDI events: The number of DDI events that are waiting to be set or cleared on the PBX
- Pending Wakeup events: The number of Wakeup events that are waiting to be set or cleared on the PBX
- Pending Message Waiting events: The number of Message Waiting events that are waiting to be set or cleared on the PBX
- Pending Room Transfer events: The number of Room Transfer events that are waiting to be sent to the PBX

The additional information types will be **Greyed Out** on the display if they are not used in your installation

## Logging on to NEC PMS LITE

To log on, click the mouse inside the System Status window or press a key. You will see the Login dialog.

Enter your Login name and password, then click the OK button or press the Enter key. When you have logged in, you will be presented with the Main Menu



#### Main Menu

The Main Menu appears when you have successfully logged in. It provides an interface to the most commonly used operations

#### Core elements of the Main Menu

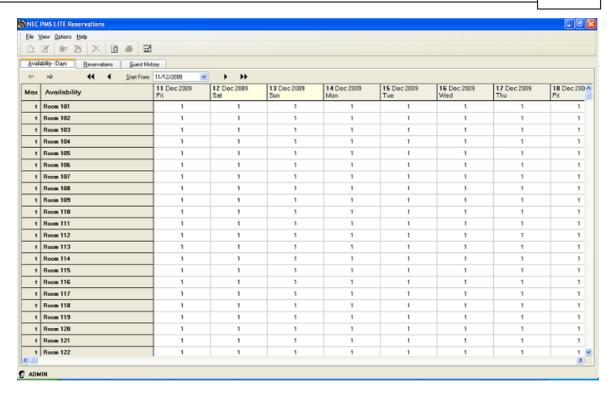
- Reservations / Check-In: Allows you to manage your Reservations and efficiently check in your guest arrival
- Check-Out: Allows you to check-Out one, many or all guests
- Room Management: Allows you to amend guests attributes while they are resident in the hotel
- Standard Hotel Reports: Displays the Standard Hotel Reports Menu
- Advanced Hotel Reports: Refer to your System Administrator
- Telephone Charge Enquiry: Displays the Charge Enquiry window that can calculate an estimated bill for a telephone call if a guest wishes to know in advance how much the call is likely to cost from their room
- Account Details: Displays the Ancillary Charges & Credit/Payment Window. Allows you to add predefined item charges to a guest's room account and manage the guest account
- System Management: Displays the System Management Menu and will route you to further system configuration
- System Status: Returns the screen back to the System Status Window

#### **System Functionality**

This section details the key system functions such as Creating & Editing a Reservation, Check-In, Adding Charges and Payments & Check Out

#### Creating a reservation

When you click on Reservations / Check in, the Main Reservation page will be displayed. From here you can make reservations or select a reservation and Check the guest into the system

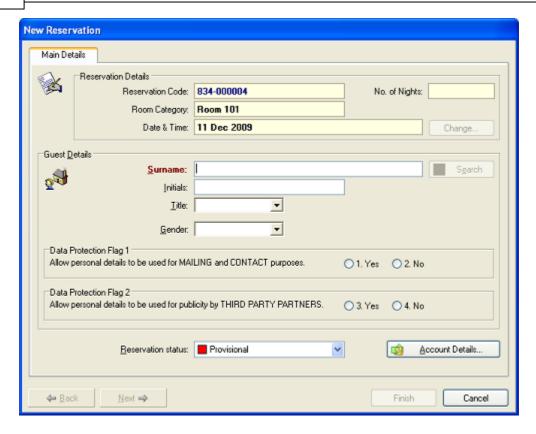


Select a room from the list on the left of the screen then select a date the guest wants to book, the amount of rooms available will display on the screen.

If you want to select a date range then click on the first date and, whilst holding down the left mouse button drag, it to the end date, this will select a date range.

Once the date has been selected, click on the new reservation icon in the top left or select File and New Reservation.

Once you've clicked on New Reservation you will see the screen below



At this stage you add the guests Surname, Initials, Title and Gender; you can also decide to allow personal details to be used for mailing and also to allow data to be used by third parties.

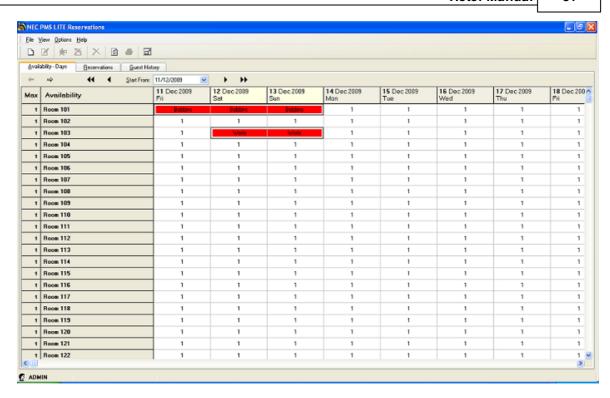
Once you've entered the required fields (shown in red) the Finish button becomes active.

2 further tabs are available at the top of the window to allow further input of Guest database information

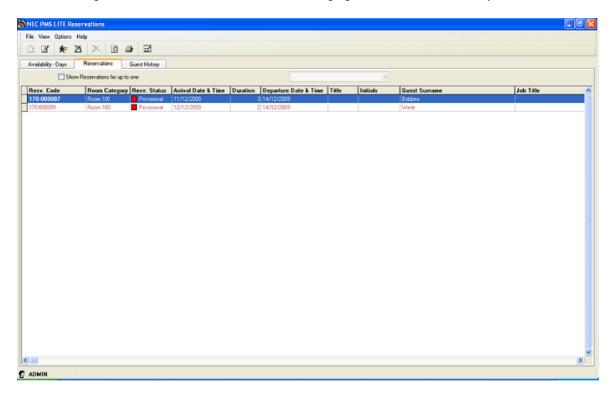
Once all of the "required fields" have been completed, click the Finish button to save and register the reservation

## **Editing Reservation details**

By double clicking the reservation on the availability chart you can amend the personal details or change the date range for the booking



Alternatively, all reservations are listed under the reservations tab. Double clicking on a reservation enables the same editing rights as from the availability chart.

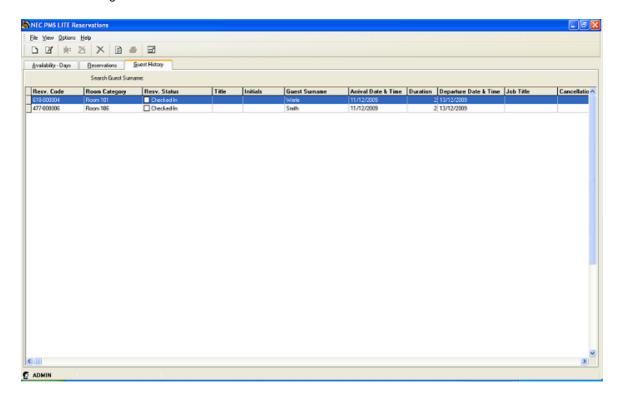


#### **Reservation Guest History**

All guest information is held in the System database for your extraction at a later date. Click on the Guest

History tab to display all guest database information.

By highlighting the required customer (the screen can be sorted by any field simply by clicking on the column heading) double click or select the edit icon in the top left hand corner of the screen and you can then amend the guest details



#### **Guest Arrival**

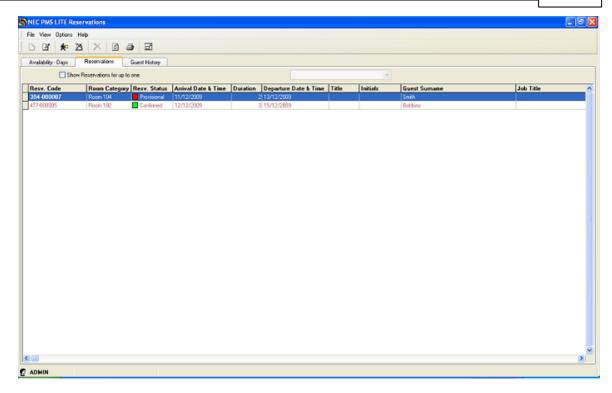
Select the guest arrival either from the availability chart or from the Reservations list [same day arrivals in

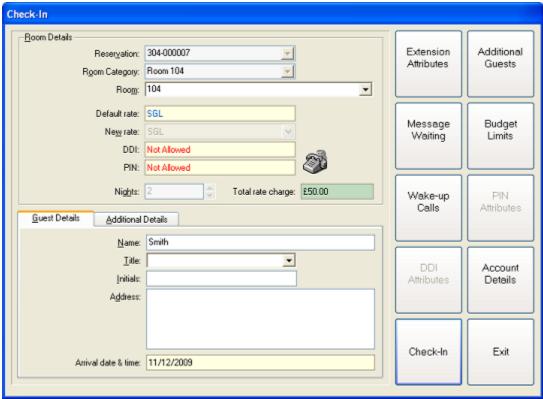
GREEN] and then click on the Check In icon.



Reservations that are listed in RED signify that they are for future dates. The application will only permit you to Check In a current arrival highlighted in Green from the reservations list

Note: reservation status has been changed to confirmed to allow check-in.

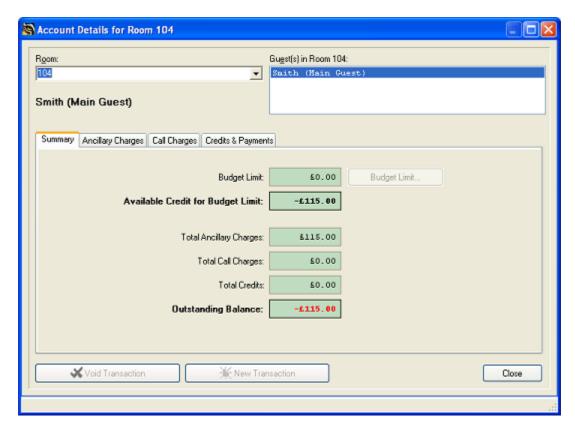




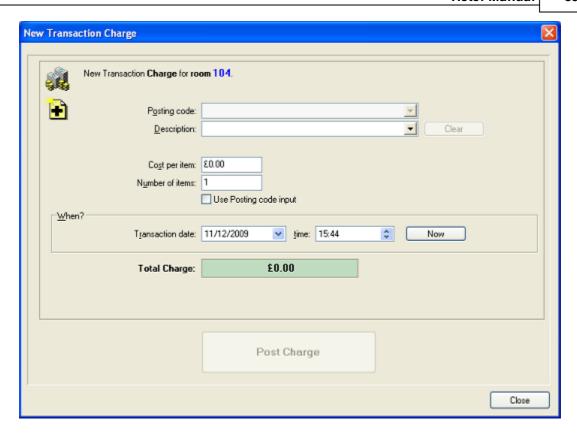
From the check in screen clicking on Check-in or pressing F10 on the keyboard will check the guest into NEC PMS LITE and create their account ready for charges to be applied

Once checked-in the Account details will be automatically shown on screen and the user has the ability to

add charges and payments directly as necessary



By following the screen prompts, charges and payments can be updated at will



You can enter either the **Posting Code** or the **Description** depending on the state of the tick box in the bottom left of the window

On zero cost items you can change the cost per item.

On fixed items this field cannot be changed

Click **OK** to confirm the charge or **Cancel** to quit back to the ancillary charges menu.

In order to confirm this charge has been added you must Post it.

Click the Post button to do this

If you wish to remove a charge you may Void it.

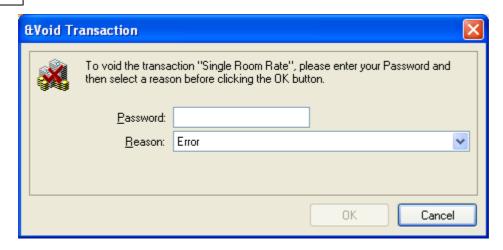
To void a charge you must know the authorisation code and also specify a reason as to why you are voiding it.

To void, please select the charge you wish to void.

Click Void and a new window will appear.

Enter your code and reason.

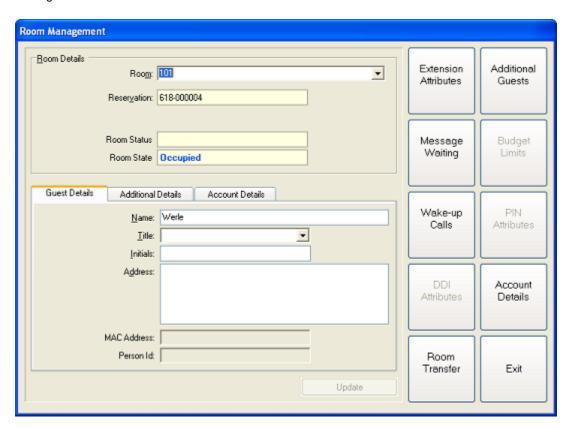
Click **OK** to begin the void procedure or **Cancel** to return to the Ancillary Charges menu



Telephone Charges are added automatically to the Guest Account with no manual intervention

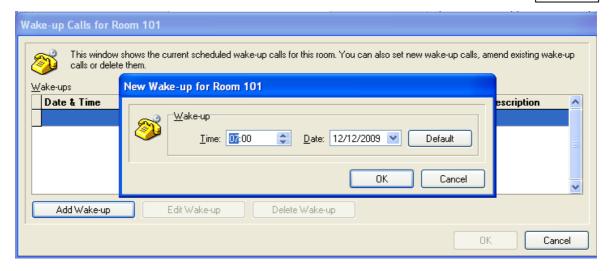
## **Room Management**

All charges and adjustments to the Guest messaging, telephone configuration and account details management can be executed from within this menu



As with the Check-in menu the additional details contain the language information and extension name display

From this screen it is also possible to set wake-up calls for the guest. To set a Wake-up call simply press the **Wake-Up Calls** button.

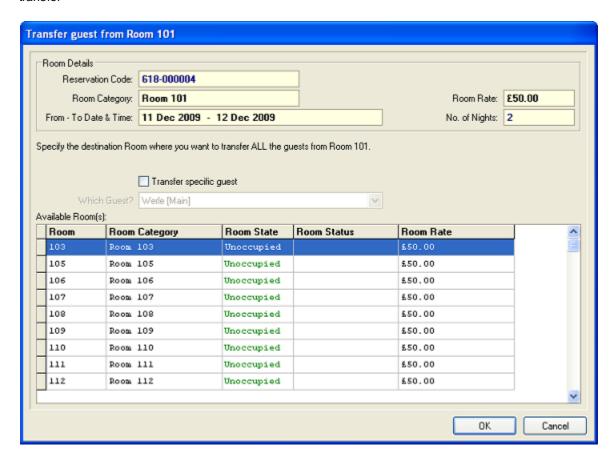


Select Add Wake-up and enter the time and date of the new wake-up call.

#### **Room Transfer**

The Room Management menu also allows you to Room Transfer a guest.

Click the button to display a new window. From this you can see the unoccupied rooms available for the transfer



**Reports Overview** 

The following Reports can be obtained through the "Standard Hotel Reports" menu:-

END OF DAY AUDITING

**GUEST LISTING** 

**ROOM LISTING** 

CARRIER COST REPORT

ADMIN TELEPHONE USAGE

AVAILABILITY REPORT

#### **End of Day Reports**

The End of Day Audit tracks the payments and charges in summary, and detail, for each room since the last report was generated

The End of Day report menu features three options, to **Preview** an End of Day report, to **Audit** End of Day report and to view **Previous** audited End of Day reports

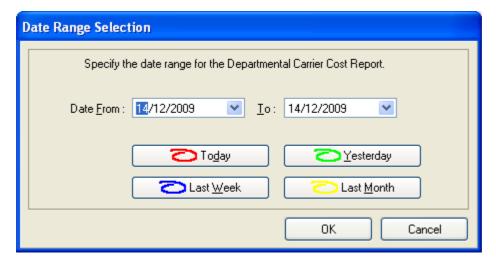
#### Elements of the End of Day Reports Menu

- Preview End of Day Report: displays the End of Day report and provides an option to print the report without auditing the supplied data
- Audited End of Day Report: prints the End of Day report and also audits the data
- · Previous Audited End of Day Reports: allows you to reprint previously Audited End of Day reports

#### **Departmental Carrier Cost Report**

The Departmental Carrier Cost report provides information for the number of calls, duration, units, actual cost, billed cost and the profit for each department (Figure 36).

The Departmental carrier cost report request a "from and to date range". This can be any length of time you wish to use.



#### **Room Listing Report**

The Room Listing report shows information about Room, State, Status, Guest Name, Primary Extension and Secondary Extensions

Once you have clicked on Room Listing a preview screen will appear. You can filter on Status and State. Status is either Occupied or Vacant and State signifies Clean or Dirty

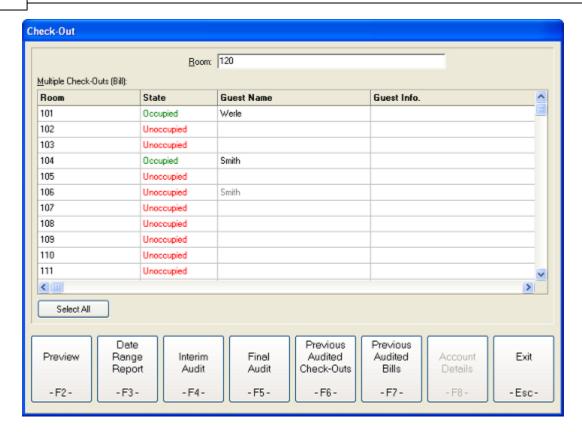
#### **Guest Listing Report**

The Guest Listing report shows information about all currently checked-in guests. It includes details about guest name, room, checkin date and time, total telephone charges, total ancillary charges, total credits, outstanding balance, budget limit, credit available, class of service, message waiting, wakeup date and time and guest info

## **Check-Out**

From this menu you can produce a final guest invoice or reprint previous check outs if required

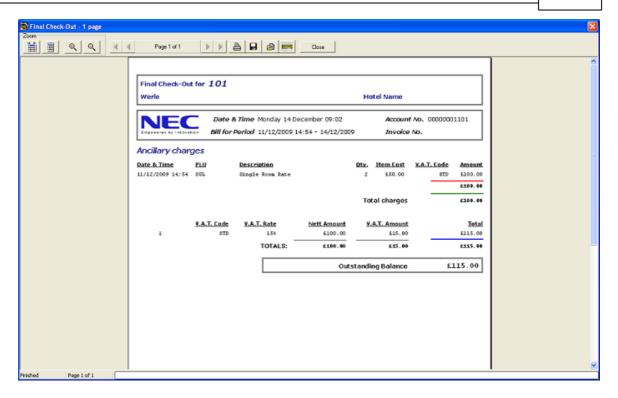
The "Final Audit" option is taken when the guest is departing and settling the account.



The menu shows a list of all rooms, the current state and the main guest name.

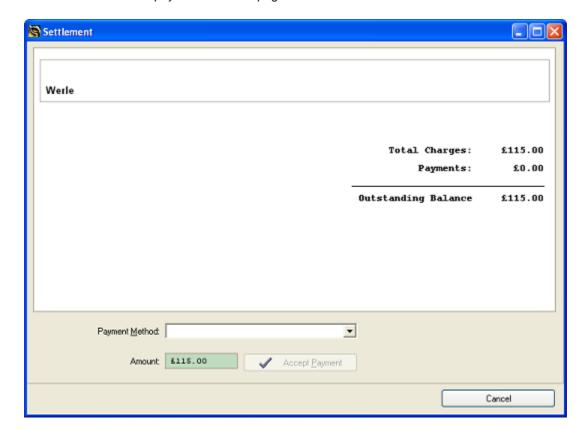
You can navigate the rooms by either, typing the number in to the box in the top right, using the keyboard cursor keys to scroll through the list or using mouse to use the scroll bar on the right of the list.

The **Select All** button will select all rooms in the list or, by using the **CTRL** key and the selected rooms, you can multi-select as you desire.



Each Invoice will highlight the ancillary charges, telephone charges and previous deposits and payments made

Select **Close** to move to payment selection page.



Select payment method from drop down list, **Accept Payment** button will then become active. Click **Accept Payment** and page will revert back to check out page.

#### **Elements of Telephone Charge Enquiry**

- Room: To specify for which room you want to cost the call, first enter the Room field if not already highlighted, then do one of the following: -
  - .1.Click inside the Room field or press the ALT and Down Arrow keys together to show a list of available rooms. Select the room from the list or;
  - .2.Use the Up Arrow or the Down Arrow keys to select the room or;
  - .3. Type the room name or number
- Number to Dial: Type in here the telephone number (you do not have to type in all the digits as long as it has at least the STD code for the district)
- **Destination of Call**: If you are unsure of the STD code for the destination you wish to calculate then you can use the drop down menu to select a destination.
  - The system will then lookup the STD code for you
- Expected Duration: Type here the expected duration of the call in HH:MM:SS
- · When?: Type in here the date and time when the call will be made.
  - This is defaulted to the current time and date when the window is first shown.
  - If the window has been on screen for a long time you can click the Now button and the current date and time will be entered in the fields

#### **Click Cost Call**

- **Destination of Call**: This field will display the destination of the proposed telephone call when all the other information has been specified and costed
- Approx. Call charge: This field will display the approximate call charge for the guest when all other information has been specified and costed
- Tariff Used: This field will display the tariff that the system is using to estimate this charge
- Approx. Carrier cost: This field will display the approximate charge to the Hotel for the telephone
  call. This field can be disabled in the System Management

Click Close to return to the Main Menu

## 1.6 Hotel - UM8000 Connection

## **Hotel - UM8000 Connection**

#### **UM8000 Overview**

The UM8000 voice mail is a fully featured voice mail system that is designed for intregration with the SV8100 telephone system.

When installed in conjuction with the PMSU the UM8000 enhances the Hotel functionality of the system.

#### **Hospitality Features**

Upon check-in via a Hospitality application connected to the PMSU or Tiger software the UM8000 creates a new mailbox for the guest.

The Message Waiting lamp flashes on the guest phone idicating a new message.

Upon check in the guest can then set various configurable options including language, greeting, password, directory membership.

Upon check-out the mailbox is deleted and any messages still in the mailbox are stored in a temporary

mailbox that can be accessed for a preset time period.

The mailbox is accessed via dialling the voice mail pilot number, dialling # to return to the opening prompt and dialling 654(configurable) followed by the room number.

## **SV8100 Configuration**

#### IP Address Setting

Prior to installing the card in the system, it is a necessary to set the IP address for the slot the card is to be installed in.

This is configured as follows: For the slot the UM8000 blade is to be installed in set the following:

- PRG10-55-01 IP Address set the IP address for the UM8000 blade
- PRG10-55-02 LAN setup leave as Auto
- PRG10-55-03 Main/Add-on set as Main
- PRG10-55-04 Subnet mask set the subnet mask for the UM8000 blade
- PRG10-55-05 Gateway set the default gateway for the UM8000 blade

Prior to installation it is important that the system date and time has been set on the SV8100 system.

After installation the system ports allocated to the UM8000 blade can be obtained either via PCPro or via command 10-03.

If PCPro is used to obtain the port information, the blade is listed as a CD-VM00 blade.

After the port allocation has been noted the SV8100 can be configured for the UM8000 operation via the following commands as follows:

- PRG16-02-01 assign UM8000 ports to an unused department group.
- PRG11-07-01 assign the department group a pilot number.
- PRG15-03-03 assign the UM8000 ports as 'Special', this enables sending of DTMF to the UM8000 for routing and single digit options.
- PRG45-01-01 assign the department group, chosen above, as the Voice Mail department group.

## **UM8000 Configuration**

In Order to configure the UM8000 for operation with the PMSU and hospitality, it is necessary to 'log-on' to the card via a suitable web browser interface.

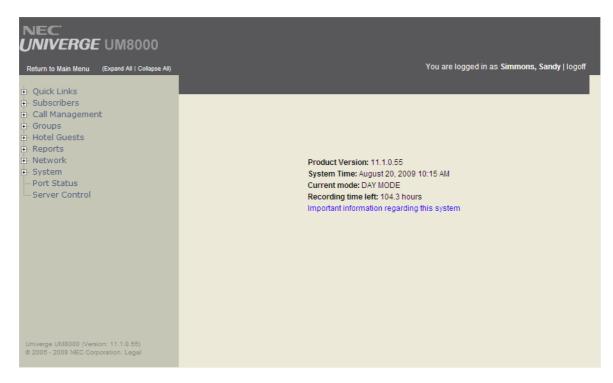
This is achieved by entering the IP address as entered above followed by/admin E.g. http://192.168.1.19/admin

A user and password screen will appear, the user is \$nec and the password should be left blank as below:



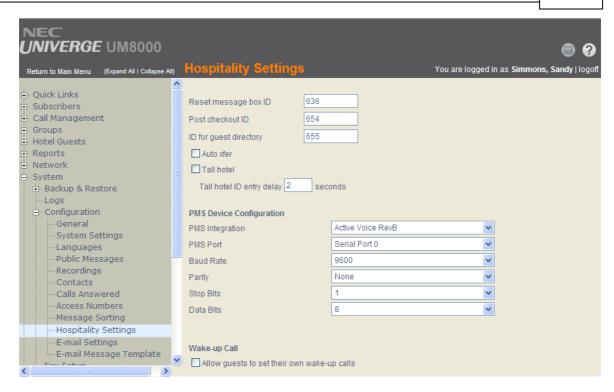
Click the Login button.

After login the following screen will be displayed:



The initial Hospitality configuration settings are accessed via selecting from the menu tree, 'System/configuration/Hospitality Settings'

The screen below is the displayed:



From this screen various integration setting can be adjusted for integration with various systems. It is recommended that the following are set:

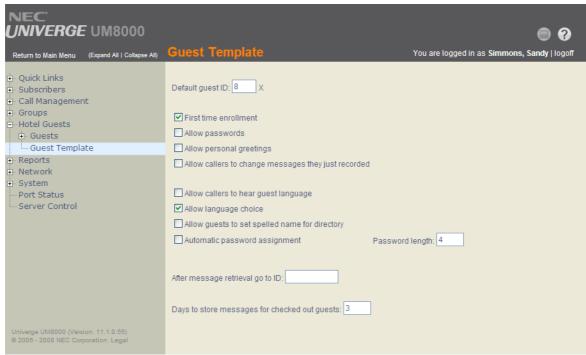
- **PMS Integration** for connection to PMSU set as Active Voice RevB, for connection to Tiger set as Centigram.
- Wake-up call uncheck this box, wake-up calls are provided by the SV8100.

Additional settings are available via this page, including Baud rate settings these should, however be left as default.

Via this page, by scrolling down, it is also possible to set a greeting to be heard when the guest first checks into their mailbox during the customisation/first enrollment stage.

Customisation of the template for new guest mailboxes can be defined by selecting, from the menu tree, hotel guests/guest template.

The screen below is then displayed:



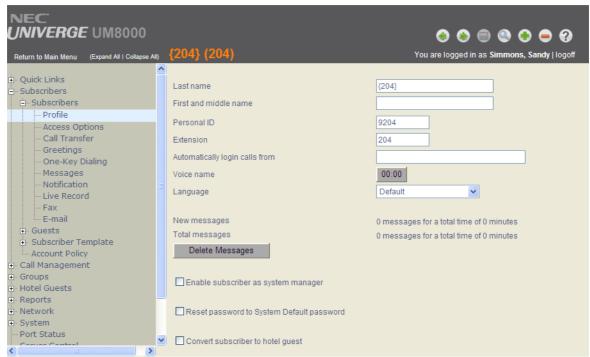
Selections on this page can be made to enable a first time enrollment.

The first time enrollment allows new guests to customise their mailbox with the following options:

- Language selection
- Password
- · Personal Greeting
- Entry into Hotel directory

It may, in some instances, be necessary to delete individual subscriber mailboxes that may ovelap guest mailboxes.

To delete subscriber mailboxes, select the 'subscribers/subscibers/profile' from the menu tree: The Page below is displayed:



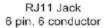
Using the arrow keys at the top of the page, navigate to the mailbox required and click the 'minus' button. A prompt will appear asking for confirmation of the deletion.

#### **UM8000** connection

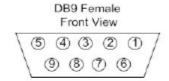
Connection to the UM8000 blade from either the PMSU or Tiger PC is via a serial lead.

The lead connects to the serial RJ11 connector on the front of the UM8000 blade and to the PMSU via the COM2 port.

The pinouts required for the cable are as follows:







1	RJ1	<u>1</u>	DB9	
DTR	1		4	DSR
TXD	2		3	RXD
GND	3		5	GND
GND	4		NC	
RXD	5		2	TXD
DSR	6		1	DTR

# 1.7 Hotel - Receptionist Guide

## **Hotel - Receptionist Guide**

## Receptionist Quick Guide

Feature	Operation			
Check In	738 + room number			
Check Out	739 + room number			
	741+ room number + Status (1-4)			
	1 = Room Clean			
Room Clean Status	2 = M aid Required			
	3 = M aid in Room			
	4 = Inspection Required			
Toll Restriction Class	737 + room number + Class (01-15)			
(when checked in)	767 + Toolii Halliber + Class (01 15)			
Room to Room Call Restriction	Set = 735 + room number			
Room to Room Can Restriction	Cancel = $736 + \text{room number}$			
Walta Lin Call	Set = 733 + room number + hhmm (24hour clock)			
Wake Up Call	Cancel = $734 + \text{room number}$			
	c + Option (0-5)			
Room Status Printout	0 = All Printouts			
	U = All Printouts			

	1 = Room Status List
	2 = Call Restriction List
	3 = Do Not Disturb and Room Clean List
	4 = Message Waiting List
	5 = Wake Up Call List
D- N-4 Distant	Set = <b>729</b> + room number
Do Not Disturb	Cancel = $730 + \text{room number}$
Room Monitor	770 . 2
(SLT phone only)	770 + 2 + room number

#### **Hotel DSS Console**

LVL	NO	STAT	DATE	TIME	ITEM	UNIT	SLT	PRT	PARAMETER
MIN	0068	ERR	01/22/09	09:30	VoIP All DSP Busy	VoIPDB	01	00	STA
MIN	0068	ERR	01/22/09	09:31	VoIP All DSP Busy	VoIPDB	01	00	TRK
MIN	0068	ERR	01/22/09	09:35	VolP All DSP Busy	VoIPDB	01	00	LNK
MIN	0068	ERR	01/22/09	09:40	VoIP All DSP Busy	VoIPDB	01	00	NET

The reception telephone can have a 60 button DSS console assigned that will show the status of the hotel room telephones (for example checked in, vacant, room clean).

It will also show the status of other extensions (idle, busy, DND, Call forward).

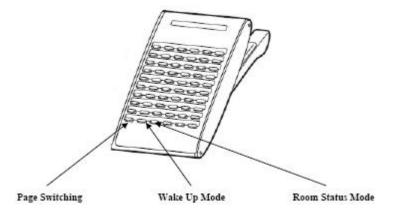
The flash patterns of the busy lamp keys can be changed within the system configuration.

The DSS Console provides the supervisor's station with unique one-touch room monitoring abilities. Instead of relying on an elaborate off-line tracking system, the supervisor can press a button on their DSS Console to see:

- Room telephones with messages waiting
- Room telephones that have Wake Up Calls set or missed
- The status of each room (Checked In, Checked Out, Maid Required, Maid in Room, or Ready to Inspect)

The DSS Console also gives the supervisor's station the full complement of business mode DSS Console features, including:

- One-button calling to extensions, Door Boxes and outside lines
- Busy Lamp Field (BLF) for extensions and Door Boxes
- Night Service Mode switching
- One-button access to Service Codes and Programmable Feature Key codes



The DSS keys, when configured above, will give a visual indication as to the status of the Hotel rooms.

### Page Switching (key code 95)

#### There are a possible 120 busy lamps available

Red = Buttons 1~54 are Rooms 1~54 Green = Buttons 61~114 are Rooms 61~114

#### Wake Up Mode (key code 92)

ON = Wake Up Mode Set OFF = Wake Up Mode Not Set FAST FLASH = Wake Up Call Missed

#### Room Status Mode (key code 93)

ON = Checked In and Clean
OFF = Checked Out (clean and available)
SLOW FLASH = Maid Required
MEDIUM FLASH = Maid in Room
FAST FLASH = Inspect Room

The Hotel reception telephone can use the Programmable Function keys on their keyphone but these will not provide DSS lamp indication for hotel room telephones.

#### **DSS Console Lamp Indications**

The DSS lamps will show the status of the room telephone:

Message Waiting (Without lifting the handset, make sure the keys programmed for Room Status Mode and Wake Up Call mode are off.)

ON (green) = A Message Waiting

OFF = No messages

Wake Up Call Status (Without lifting the handset, press WAKE UP)

ON (green) = A Wake Up Call set OFF = No Wake Up Call set FAST FLASH = Wake Up Call missed

Check in/Out Status (Without lifting the handset, press STATUS)

ON (green) = Checked In and Clean OFF = Checked Out (Clean and Available) SLOW FLASH (green) = Maid Required MEDIUM FLASH (green) = Maid in Room FAST FLASH (green) = Inspect

### Function Key Programming To change the function of a General Function programmable key:

- 1. Press idle CALL key.
- 2. Dial 851.
- 3. Press the key you want to program.
- 4. Enter the 2-digit key function, any additional information needed for the key and press HOLD. Available functions are 00-99 and line keys 001-200 (for a DSS key enter 01+room telephone number +HOLD, for Night Mode enter 09+mode number).

To undefine a key, enter 00.

#### To change the function of an Appearance Function programmable key:

- 1. Press idle CALL key.
- 2. Dial 852.
- 3. Press the key you want to program.
- 4. Enter the 3-digit key function and any additional information needed for the key.

Available functions are \*00-\*99 and line keys 001-200.

To undefine a key, enter 000.

When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (852+000).

#### Check In and Check Out

When hotel room telephones are checked in their toll restriction class can be changed automatically by the system to allow the guest to make calls.

#### To Check In a hotel room telephone:

- 1. Lift the handset.
- 2. Dial 738.
- 3. Dial the extension number of the room you want to check in.

You hear confirmation tone.

4. Hang up.

In the STATUS mode, the DSS Console key for the room is on (green).

#### To Check Out a hotel room telephone:

You can set a room as checked out only if you have previously checked it in.

- 1. Lift the handset.
- 2. Dial 739.
- 3. Dial the extension number of the room you want to check out.

You hear confirmation tone.

4. Hang up.

In the STATUS mode, the DSS Console key for the room is off.

When the room is checked out the system will automatically cancel any Message Waiting, Do Not Disturb, Room to Room Call Restriction, Toll Restriction and Wake Up calls that may be set at the room telephone.

#### **Room Clean Status**

You can use the DSS console lamps to indicate the status of the hotel room, commonly Clean (occupied or not), Maid Required, Maid in Room, Inspection Required.

1. Lift the handset.

- 2. Dial 741.
- 3. Dial the extension number of the room you want to set.
- 4. Dial the room status code:
- 1 = Room Clean
- 2 = Maid Required
- 3 = Maid in Room
- 4 = Inspection Required
- 5. You hear confirmation tone.
- 6. Hang up.

In the STATUS mode, the DSS Console shows the room's status.

ON (green)= Checked In and Clean

OFF = Checked Out and Clean

SLOW FLASH (green) = Maid Required

MEDIUM FLASH (green) = Maid in Room

FAST FLASH (green) = Inspect

The room status can also be set from the room's telephone, refer to the Hotel Staff - Room Telephone Guide.

### **Toll Restriction**

When a room is checked in the telephone can be given a different Toll Restriction class, this would usually have no restrictions. When the room is checked out it would typically have a fully restricted.

This operation is automatic if setup in the system configuration.

#### Changing Toll Restriction class while room is checked in

The Toll Restriction class number can be changed for a room telephone when checked in.

The Toll Restriction classes must be pre-defined in the system configuration, check with your system maintainer for the Toll Restriction class numbers you can use.

To change a room telephone's Toll Restriction (When Checked In) level:

- 1. Lift the handset.
- 2. Dial 737.
- 3. Dial the extension number of the room which you want to change the Toll Restriction (When Checked In) level.

You hear a single beep.

4. Enter the new Toll Restriction (When Checked In) level (01-15).

You hear confirmation tone.

#### **Room to Room Call Restriction**

You can prevent a guest from placing calls to other hotel rooms.

This will not prevent the guest placing outside calls or calls to non-hotel room telephones.

#### To enable Room-to-Room Call Restriction for a guest's phone:

- 1. Lift the handset.
- 2. Dial 735.
- 3. Dial the guest's phone number.

You hear confirmation tone.

The guest can not dial any other Hotel room extension.

#### To disable Room-to-Room Call Restriction for a guest's phone.

1. Lift the handset.

- 2. Dial 736.
- 3. Dial the guest's phone number.

You hear confirmation tone.

## Wake Up Call

A Wake Up call is like an alarm clock for the guest.

The guest can also set and cancel their own Wake Up calls.

#### To set a Wake Up for a room:

- 1. Lift the handset.
- 2. Dial 733.
- 3. Dial the number of the room phone that should receive the wake up.
- 4. Dial the time for your wake up.

Use a 24-hour clock. For example, 1:00 PM = 13:00. You hear confirmation tone.

5. Hang up.

#### To cancel a Wake Up for a room:

- 1. Lift the handset.
- 2. Dial 734.
- 3. Dial the number of the room phone whose wake up you want to cancel.

You hear confirmation tone.

The system can also be setup to alert the Reception telephone when a Wake Up call is not answered. The display will show the room number of the missed Wake Up call.

#### To check the Wake Up calls set

If you have a DSS console:

1. Press the Wake Up Call Status key

ON (green) = A Wake Up Call set

OFF = No Wake Up Call set

FAST FLASH (green) = Wake Up Call missed

To clear the missed Wake Up call indication place a call to the room from the Reception telephone, when the call is answered the lamp will go out.

#### **Room Status Printouts**

The system can have a printer connected to a CTA adapter (CTA adapter is installed in a keyphone) that can be used to printout the following reports.

- · Room Status List
- Call Restriction List
- Do Not Disturb and Room Clean List
- Message Waiting List
- Wake Up Call List

#### To have your printer output the Room Status Printout:

Your printer should be location conveniently next your phone.

- 1. Lift the handset.
- 2. Dial 742.
- 3. Dial the Room Status Printout option:
- 0 = AII Printouts
- 1 = Room Status List (Check-in and House Cleaning Status)
- 2 = Call Restriction List
- 3 = Do Not Disturb and Room Clean List

4 = Message Waiting List 5 = Wake Up Call List 4. Hang up.

#### **Room Status Printout example**

Room Status List ------ 11/04/2006 14:06 Room Clean(Occupied) --- Check In 236, 238 Room Clean(Vacant) --- Check Out 237, 239, 240 Maid Required 241 Maid in Room

Inspection Required 242, 243, 244, 245

**END** 

## **Call Restriction List example**

Shows rooms that have Room to Room Call Restriction set and the current Toll Restriction class number of each hotel room.

Calling Class List ------ 11/04/2006 14:21 Room to Room Barring 236 Outside Call Class 236 -02, 237 -02, 238 -01, 239 -02, 240 -02, 241 -02, 242 -02, 243 -02, 244 -02, 245 -02

END

## Do Not Disturb and Room Clean example

DND and Clean Up Check ------ 11/04/2006 14:23 Do No Disturb 242 Clean Up Check 241

**END** 

## **Message Waiting List example**

Message Service List ----- 11/04/2006 14:39 236

**END** 

#### Wake Up Call List example

Wake Up Call List ----- 11/04/2006 14:40 236 -14:50, 239 -07:30, 243 -06:45

**END** 

#### **Do Not Disturb**

You can set Do Not Disturb for a room telephone to prevent calls being made to the room telephone. The room telephone can also set/cancel Do Not Disturb, refer to Hotel Guest - Room Telephone Guide.

To enable DND for a room telephone:

- 1. Lift handset.
- 2. Dial 729.
- 3. Dial the number of the extension for which you want to enable DND.

You hear confirmation tone.

4. Hang up.

#### If you need to contact the guest you may be able to override the Do Not Disturb:

- 1. Lift handset.
- 2. Call the room telephone.
- 3. Dial 809 (if override is enabled the telephone will ring).

To cancel DND for a room telephone:

- 1. Lift handset.
- 2. Dial 730.
- 3. Dial the number of the extension for which you want to disable DND.

You hear confirmation tone.

4. Hang up.

## **Message Waiting**

You can leave a Message Waiting indication (flashing lamp) for a guest.

When the guest replies to the Message Waiting the system will automatically setup a call to the Reception telephone.

## To leave a Message Waiting:

- 1. Call the room telephone. There is no answer.
- 2. Dial 841.

You hear confirmation tone. The Message Waiting lamp flashes on the room's telephone.

3. Hang up.

If you want to cancel the message you just left, lift the handset and dial 871 and then the room number.

#### To Leave a Message Waiting Without First Calling the Extension:

- 1. Lift the handset.
- 2. Dial 726.
- 3. Dial the number of the room telephone at which you want to leave the message waiting.

You hear confirmation tone.

## **Room Monitor**

The room telephone can be used to monitor the audio within the hotel room.

The monitored room telephone and the monitoring telephone at reception must be single line telephones, not keyphones.

The room telephone must first be setup to be monitored, refer to the Hotel Guest - Room Telephone Guide.

- 1. Lift the handset.
- 2. Dial 770 + 2.
- 3. Dial to room number.

You hear confirmation tone and can hear the audio near to the room telephone.

If the room telephone is not setup to be monitored you will hear busy tone.

4. You can monitor other room telephones, if setup to be monitored, by going on hook and repeating steps 1 to 3.

## 1.8 Hotel Guest - Room Telephone Guide

## **Hotel Guest - Room Telephone Guide**

#### Room Telephone Quick Guide

Feature	Operation  Lift the handset and dial the code to set any feature, when done replace the handset.		
Wake Up Call	To set: Dial <b>731</b> + time (hhmm) using 24 hour clock		
	To cancel: Dial <b>732</b>		
D. N. (D) ( )	To set: Dial <b>727</b>		
Do Not Disturb	To cancel: Dial <b>728</b>		
Reply to Message Waiting	Dial <b>841</b>		
Room Monitor	Dial <b>770</b> + 1 + telephone number that will be used to monitor		
Call to Reception	Dial 0		
Outside Line	Dial 9 and wait for dial tone then dial the number you require		

## Wake Up Call

A Wake Up call is like an alarm clock.

You can also ask Reception to set a wake up call for you.

### To set a Wake Up call:

- 1. Lift the handset.
- 2. Dial 731.
- 3. Dial the time for your wake up (hhmm).

Use a 24-hour clock. For example, 7:30 AM = 0730.

You hear confirmation tone (you may also hear the time repeated back to you).

4. Hang up.

#### To cancel a Wake Up call:

- 1. Lift the handset.
- 2. Dial 732.

You hear confirmation tone.

#### To answer a Wake Up call:

Your room telephone will ring at the time set for the Wake Up call.

1. Lift the handset.

You hear simulated music (you may hear a pre-recorded announcement instead).

## **Do Not Disturb**

You can stop calls to your telephone by setting Do Not Disturb.

Reception may be able to override your Do Not Disturb if they need to contact you urgently.

#### To set Do Not Disturb:

- 1. Lift handset.
- 2. Dial 727.

You hear confirmation tone.

3. Hang up.

#### To cancel Do Not Disturb:

1. Lift handset.

You hear interrupted dial tone when you lift the handset.

2. Dial 728.

You hear confirmation tone.

3. Hang up.

## **Message Waiting**

Reception can leave a Message Waiting indication for you, this will be shown by a flashing lamp on your telephone.

When you reply to the Message Waiting a call will be placed to Reception.

To answer a Message Waiting left at your phone:

1. Lift the handset.

Listen for dial tone.

2. Dial 841.

You will automatically call the extension that left you a message.

### **Room Monitor**

The room telephone can be used to monitor the audio within the hotel room.

The room telephone must first be setup to be monitored.

- 1. Lift the handset.
- 2. Dial 770 + 1.
- 3. Dial to telephone number that will be used to monitor the room (ask Reception for the number). You hear confirmation tone.
- 4. Leave the handset off hook near to the sound you would like monitored.

Note - while your telephone is being monitored your calls will be overheard.

To cancel the room monitor the telephone that is monitoring your room must be placed on hook, ask Reception to do this.

## 1.9 Hotel Staff - Room Telephone Guide

# **Hotel Staff - Room Telephone Guide**

Room Telephone Quick Guide (Hotel Staff)

Feature	Operation		
Room Clean Status	740 + Status (1-4) 1 = Room Clean 2 = Maid Required 3 = Maid in Room 4 = Inspection Required		
Common Cancel Code	720		

#### **Room Clean Status**

You can change the status of the hotel room: Clean (occupied or not), Maid Required, Maid in Room, Inspection Required.

This option may not be available due to system configuration.

- 1. Lift the handset.
- 2. Dial 740.
- 3. Dial the room status code:
- 1 = Room Clean
- 2 = Maid Required
- 3 = Maid in Room
- 4 = Inspection Required
- 4. You hear confirmation tone.
- 5. Hang up.

The room status can also be set from the Reception telephone, refer to the Hotel - Receptionist Guide.

## **Common Cancel Code**

This code will cancel the following features if set at the room telephone.

Wake Up Call, including missed.

Message Waiting

Do Not Disturb

- 1. Lift the handset.
- 2. Dial 720.
- 3. You hear confirmation tone.

# 1.10 Hotel Guest - Room Telephone Guide (Standard SIP)

**Hotel Guest - Room Telephone Guide (Standard SIP Terminal)** 

#### **Room Telephone Quick Guide**

Feature	Operation Lift the handset and dial the code to set any feature, when done replace the handset.
Wake Up Call	To set: Dial <b>731</b> + time (hhmm) using 24 hour clock
	To cancel: Dial 732
Do Not Disturb	To set: Dial 727
DO NOT DISTUID	To cancel: Dial 728
Reply to Message Waiting	Dial <b>841</b>
Call to Reception	Dial 0
Outside Line	Dial 9 and wait for dial tone then dial the number you require

## Wake Up Call

A Wake Up call is like an alarm clock.

You can also ask Reception to set a wake up call for you.

#### To set a Wake Up call:

- 1. Lift the handset.
- 2. Dial 731.
- 3. Dial the time for your wake up (hhmm).

Use a 24-hour clock. For example, 7:30 AM = 0730.

You hear confirmation tone (you may also hear the time repeated back to you).

4. Hang up.

## To cancel a Wake Up call:

- 1. Lift the handset.
- 2. Dial 732.

You hear confirmation tone.

#### To answer a Wake Up call:

Your room telephone will ring at the time set for the Wake Up call.

1. Lift the handset.

You hear simulated music (you may hear a pre-recorded announcement instead).

## **Do Not Disturb**

You can stop calls to your telephone by setting Do Not Disturb.

Reception may be able to override your Do Not Disturb if they need to contact you urgently.

#### To set Do Not Disturb:

- 1. Lift handset.
- 2. Dial 727.

You hear confirmation tone.

3. Hang up.

#### To cancel Do Not Disturb:

1. Lift handset.

You hear interrupted dial tone when you lift the handset.

2. Dial 728.

You hear confirmation tone.

3. Hang up.

## **Message Waiting**

Reception can leave a Message Waiting indication for you, this will be shown by a flashing lamp on your telephone.

When you reply to the Message Waiting a call will be placed to Reception.

To answer a Message Waiting left at your phone:

1. Lift the handset.

Listen for dial tone.

2. Dial 841.

You will automatically call the extension that left you a message.

## 1.11 Hotel Staff - Room Telephone Guide (Standard SIP)

## **Hotel Staff - Room Telephone Guide (Standard SIP Terminal)**

#### Room Telephone Quick Guide (Hotel Staff)

Feature	Operation		
Room Clean Status	740 + Status (1-4) 1 = Room Clean 2 = Maid Required 3 = Maid in Room 4 = Inspection Required		
Common Cancel Code	720		

## **Room Clean Status**

You can change the status of the hotel room: Clean (occupied or not), Maid Required, Maid in Room, Inspection Required.

This option may not be available due to system configuration.

- 1. Lift the handset.
- 2. Dial 740.
- 3. Dial the room status code:
- 1 = Room Clean
- 2 = Maid Required
- 3 = Maid in Room
- 4 = Inspection Required

- 4. Wait for approx 3 seconds
- 5. Hang up.

The room status can also be set from the Reception telephone, refer to the Hotel - Receptionist Guide.

## **Common Cancel Code**

This code will cancel the following features if set at the room telephone. Wake Up Call, including missed.

Message Waiting

Do Not Disturb

- 1. Lift the handset.
- 2. Dial 720.
- 3. You hear confirmation tone.

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