Complete Concierge User's Guide

v.3.0.2

Table of Contents

1   Introduction

Complete Concierge™ is a fully functional business VoIP telephony system that includes a PMS (Property Management System) interface. Not only does the transition to an IP-PBX save on inter-company communications and improve efficiencies by integrating with the business' data network, it leverages existing infrastructure (cabling and analog phone sets), and is compatible with the leading PMS packages.

Hotels have special requirements for their telephone systems. They need to have a separate call accounting for the guests as opposed to administration staff, they need flexible internal caller IDs, telephone lines must be closed/opened on demand, etc.

Complete Concierge is interoperable with a wide variety of PMS, such as Micros Fidelio, Micros Opera, Micros Opera Suite, Protel Hotel Systems, Amadeus Hospitality, Brilliant, Silverbyte/Optima, Newhotel and all other PMS that support FIAS (Fidelio Interface Application Specification).

Complete Concierge uses native Linux software as its engine inside an Asterisk® operating system with a FreePBX GUI. It uses Windows® administration software.

This document will show in detail how to install and configure Complete Concierge, and how to use the application's interface.

2   Supported Features of Complete Concierge

2.1   Complete Concierge Interface

2.1.1   Check-in / Check-out Process

On check-in all guest-specific data will be transmitted to the PBX. For example:

- The caller ID of the extension will be set to the format "<room_number><guest_name>".
- The phone will be barred / unbarred as per the settings in the PMS.
- The guest language will be set for the extension.

On checkout, the following tasks will be performed by Complete Concierge:

- The extension caller ID will be set to format "<room_number> Vacant".
- The phone will be barred for outgoing calls.
- Old voice mails will be deleted.
- The guest language will be reset to English.
- The "Do Not Disturb" (DND) option will be reset.

2.1.2   Room Change Actions

When a checked-in guest changes rooms, the following actions will be performed:

- Existing voicemail messages of the previous guest will be deleted.
- The old room callerid will be set to the "<room_number>Vacant" format.
- The old room DND will be reset.
- The old room phone will be set to the "barred" status.
- The check-in data for this guest will be transferred to the new room extension.

2.1.3   Wake-up System

A wake-up call can be set either via the PMS or directly by the guest (by dialing *68 from the guest phone). The Complete Concierge software will send the PMS the result of the wake-up attempt as either WAOK (wakeup ok) or WANR (wakeup not reachable). Also, cancellation of the wake-up call is possible.

2.1.4   DND Setting

Do Not Disturb (DND) can be turned on / off.

2.1.5   Class of Service / Phone Barring

The phone can be set to make outgoing calls or internal only.

2.1.6   Call Accounting

- Call charges will be transmitted automatically to the PMS account for the guest.
- The call rates can be set easily by using the Complete Concierge configurator utility.

2.1.7   Room Maid System / Room Status

2.1.8   Database Resync

Database resynchronization to the PMS.

2.1.9   Message Handling

This is performed by copying a pre-recorded message into the voice mail folder of the extension.

2.1.10 Automatic Resync

Automatic resynchronization to PBX or Micros PMS if connection to either was established. Data will be buffered and executed after reconnecting.

2.1.7   Room Maid System / Room Status

3 Complete Concierge Software Installation

Complete Concierge software may be installed on any Xorcom Asterisk IP-PBX appliance with Elastix 2.x installed. The Complete Concierge software is provided as a FreePBX module that is installed by using the standard FreePBX module installation tools.

3.1.1 Download the TGZ file

Download the `complete_concierge-3.0.2.tgz` file from http://updates.xorcom.com/servers/complete-concierge to your computer.

3.1.2 Enable Direct Access to FreePBX

To enable direct access to the FreePBX, connect to the Elastix Web interface and go to the **Security** dialog:
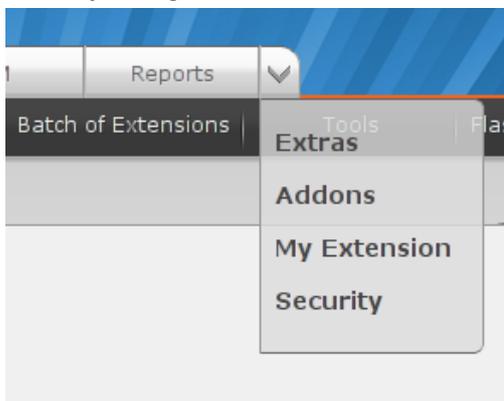
Go to the **Advanced Settings** dialog and enable direct access to FreePBX:
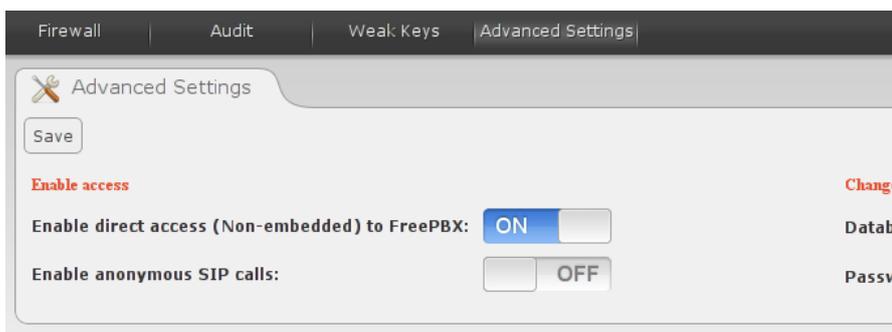
Optionally you will be able to change the password for the FreePBX Web interface. By default the Elastix Web interface password is used.

3.1.3 Connect to the FreePBX Web interface.

Go to the **PBX Configuration** and select click **Unembedded FreePBX**:
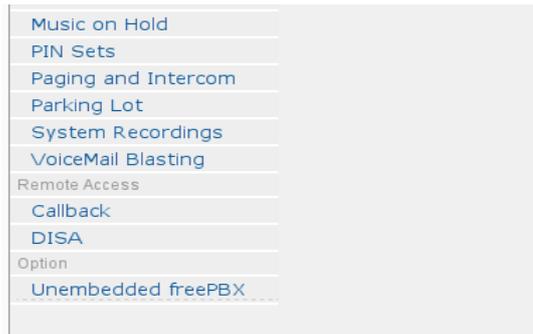
Log in as user 'admin':

3.1.4   Module Administration

Select the **Module Admin** option in the left-hand menu:
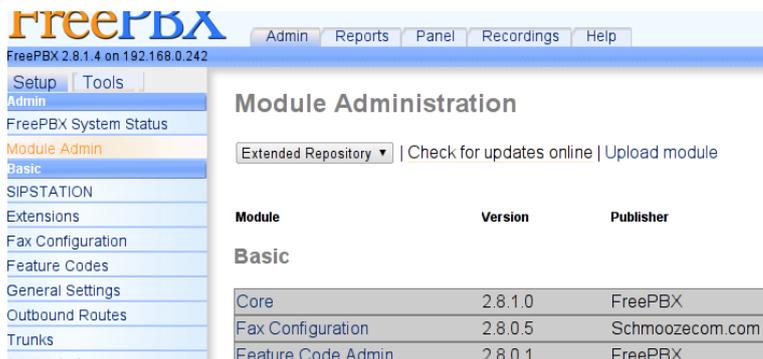
Click **Upload module** and then upload the `complete_concierge-3.0.2.tgz` file.
After the module is uploaded click the **Module Admin** option again and go to the bottom of the page where "Complete Concierge" appears in the **Third Party Addon** list:

Click on the **Complete Concierge**, select **Install** and then click the **Process** button:

Confirm the module installation:

3.1.5   MSQL Set-up

Go to the **Tools** tab in the left-hand menu and select the "Complete Concierge" item in the **Third Party Addon** list. The "first time running" dialog will be displayed:
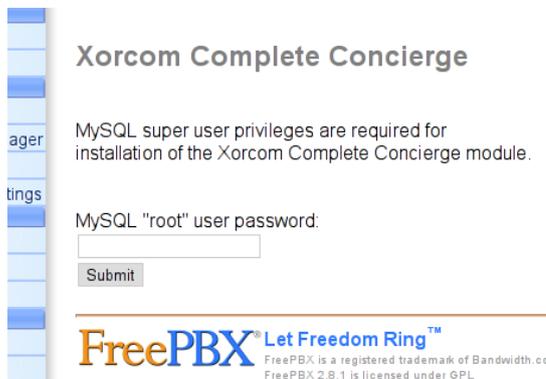
Enter the MySQL "root" user password and click the **Submit** button. The default password is `'akuo-kfo'`.

The Complete Concierge module will then create all necessary tables in the MySQL database, and install its services.

The next time "Complete Concierge" is selected in the menu the following dialog will be displayed:

3.1.6 Starting Complete Concierge Linux Services

Connect to the PBX Linux shell and run the following command:

```
/etc/init.d/pbillx start
```

Check that all four services have started:

```
# ps aux |greppb
root     9954  0.0  0.8  17056  8488 ?      S   Aug19   5:50 /var/www/html/admin/modules/complete_concierge/resources/pbFIAS
root     9955  0.0  0.8  17468  8888 ?      S   Aug19   5:38 /var/www/html/admin/modules/complete_concierge/resources/pbExec
root     9956  0.0  0.7  23780  7516 ?      S   Aug19   0:01 php -q
/var/www/html/admin/modules/complete_concierge/resources/pbCalc
root     9957  0.0  0.8  16636  8184 ?      S   Aug19   0:00 /var/www/html/admin/modules/complete_concierge/resources/pbStarter
```

3.1.7 Download the Configurator

Click the **Download Configuration Utility** button to download the Xorcom Complete Concierge Configurator from Xorcom Web site. Install the utility on a Windows computer.

Optionally, you can install a Micros Fidelio Interface demo utility. Click on the **Download Fidelio Interface Demo** button to download the utility from the Xorcom Web site. Install the utility on a Windows computer.

4   Configuring Complete Concierge

The Complete Concierge configuration is performed by using the Windows-based configuration utility that must be installed on a Windows computer. Please note that Configurator utility is used for configuration and monitoring purposes only and may be shut down once Complete Concierge has been configured.

4.1   PBX Configuration

4.1.1   PBX Extensions and Trunks

Configure the PBX extensions and trunks.

4.1.2   Outbound Routes

Configure the outbound routes for different types of call destinations. Assign a simple descriptive name to each outbound rule. Those names will be used for the room telephone class of service configuration. For example, define the following routes:

- "emergency" – for calling police, ambulance etc. This route must always be enabled, regardless of the room telephone status
- "local" – for calling a PSTN destination within the local area
- "national" – for calling any destination within the country
- "international" – for calling any international destination

4.2   Complete Concierge Configuration

- Run the "Xorcom Complete Concierge Configurator".
- Define the PBX IP address and the password for connecting to the Complete Concierge database. The default password is 'pbillx'.

The following dialog will be displayed:
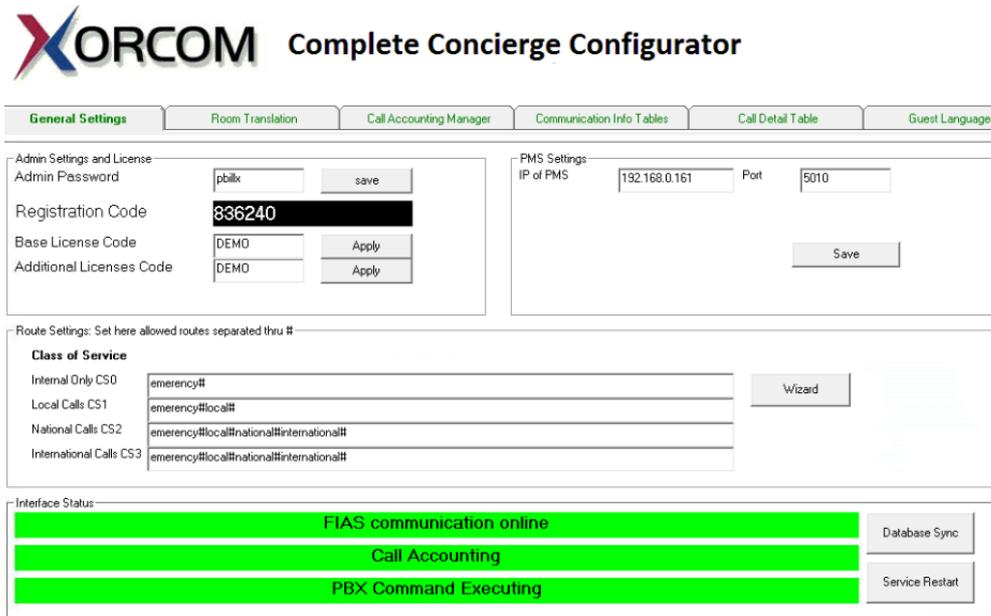
The dialog consists of the following tabs:

- **General Settings** –basic Complete Concierge settings such as license installation, IP address of the PMS system, etc.
- **Room Translation** – assignment of PBX extensions / room numbers
- **Call Accounting Manager** –tariff plan configuration
- **Communication Info Tables** –Complete Concierge/PMS communication monitoring
- **Call Detail Tables** –CDR review
- **Guest Languages** – assignment of PMS /PBX language codes

During initial configuration go through the tabs and perform the configuration actions in the same sequence as they are described below.

4.2.1   General Settings Tab

4.2.1.1   Admin Settings
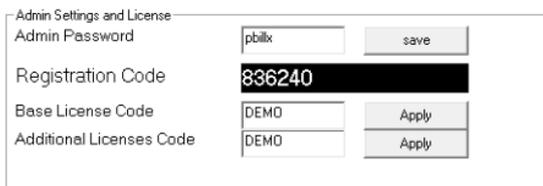
Admin Password – a password for accessing the Complete Concierge MySQL database on the PBX. If the password is to be changed, it must be changed in the MySQL database configuration as well.

License Code fields – Apply the purchased license codes here. If a license code is not applied then Complete Concierge will work in the full functional demo mode where the maximum number of supported rooms is 10.

4.2.1.2   PMS Settings

This is the IP address and port where the PMS system is listening for incoming connections.

To use Complete Concierge with a demo version of the Fidelio PMS Interface input the IP address of the Windows computer where the 'demo' is installed. In most cases it will be the same computer where the Configurator utility is running.

Click the **Save** button. Shortly, the Complete Concierge service that is running on the PBX should connect to the PMS. The "FIAS communication online" message will appear at the bottom of the screen.

If the Fidelio Demo PMS Interface is being used then the received 'LA' message should also appear:
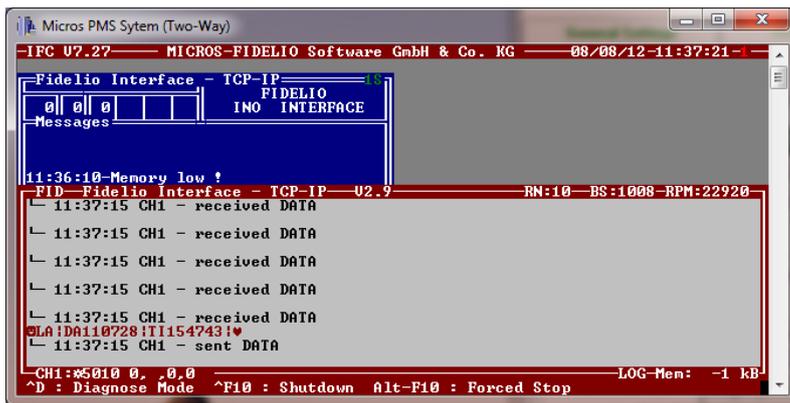
4.2.1.3   Call Permission Settings

PMS systems can restrict a room telephone to make outbound calls to particular destinations only. In terms of the PMS it is done by assigning a class-of-service (CS0 through CS3) to a room telephone.

The **Route Settings** section allows assignment of a list of the PBX outbound routes to a class-of-service.

Click the **Wizard** button. The Configurator will access the PBX and display a table with outbound routes currently defined in the PBX configuration. Use the check-boxes to select the routes for each class-of-service:

Click the **Save** button to confirm.

4.2.2   Room Translation Tab

The PMS system works with room numbers rather than extension numbers. It is possible for several PBX extensions to be installed in one room. All telephones in the room must be administered via the room number.

On this tab it is possible to assign the PBX extensions to the rooms and also to define the room number as the **Account Code** parameter for the corresponding PBX extensions. That code will appear in the **Call Detail Record** (CDR) of calls that were made from the room telephone.
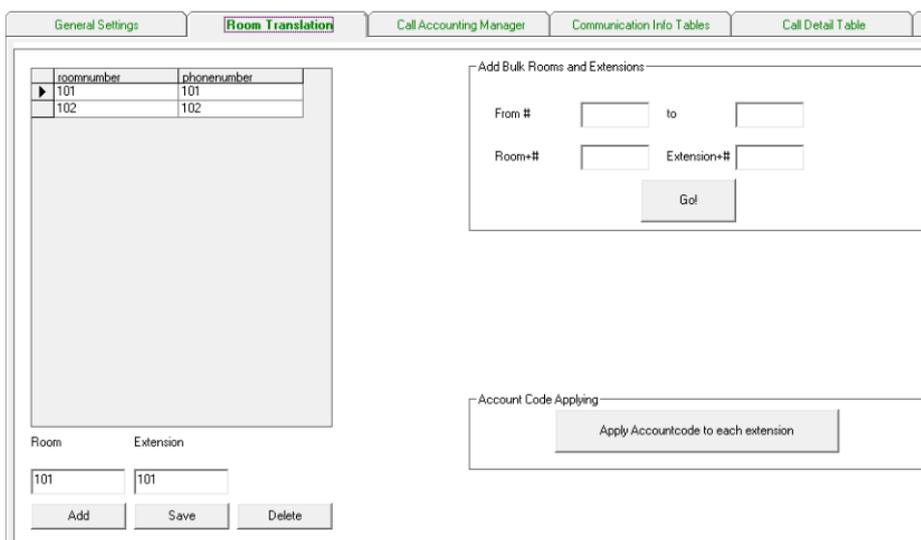
4.2.2.1   Operation with a Single Room/Extension Pair

In order to add a room/phone number pair:

- Click the **Add** button.
- Type in a room number and a phone number in the **Room** and **Extension** fields.
- Click the **Save** button.

In order to change an existing room/phone number pair:

- Click on the desired line in the table. The current room and phone numbers will appear in the **Room** and **Extension** fields.
- Edit the values as necessary.
- Click the **Save** button.

In order to delete an existing room/phone number pair:

- Click on the desired line in the table. The current room and phone numbers will appear in the **Room** and **Extension** fields.
- Click on the **Delete** button.

4.2.2.2 Bulk Operations with Room/Extension Pairs

To add multiple room/extension pairs where the room numbers are identical to the phone numbers:

- Define the first room number in the **From #** field and the last room number in the **to** field.
- Click the **Go** button.

For example, in order to define 101- 200 room/extension pairs, input 101 in the **From #** field and 200 in the **to** field.

Sometimes the room and/or phone numbers use prefixes. For example, say there are rooms A101-A151 and the corresponding telephone numbers are 1101-1151. These can be defined as follows:

- Input 101 and 151 in the **From #**and **to** fields, respectively.
- Input the character **A** in the **Room+#**field and **1** in the **Extension+#**field.
- Click the **Go** button.

The following pairs will be generated:

A101/1101

A102/1102

….

A151/1151

4.2.2.3 Account Code for the PBX Extensions

When the room translation table has been configured it is necessary to put the room number in each corresponding extension **accountcode** parameter. This is very important to ensure accurate call billing. Click the **Apply Account code to each extension** button.

The correct room number should appear on the corresponding PBX extension settings page. For example, if extension 101 was assigned to room A101 the following should appear:

4.2.3 Call Accounting Tab

This tab is used to configure the tariffs for calls to different destinations.
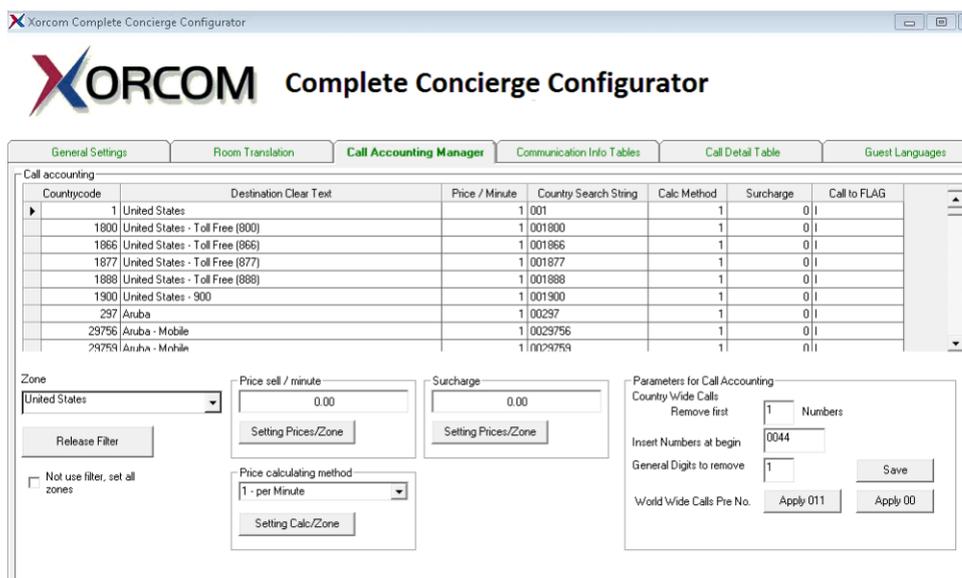
4.2.3.1 Call Accounting Principals

Complete Concierge looks for a corresponding tariff by comparing the called number with the prefix that appears in the **Country Search String** column (see the table above).

But before looking up in the table, Complete Concierge converts the dialed number according to the following steps:

A. Removes number of digits defined in the **General Digits to remove** parameter from the beginning of the called number. Many PBXs are configured in such a way that the users have to dial an outgoing line access code before dialing the phone number. For example, if the outgoing line access code is '9' then the digit 1 must be input in the **General Digits to remove** parameter.

B. If the called number length is a maximum of 7 digits then the call will be considered as a local call and the tariff for a dummy country code 7777777 will be used.

C. If the called number is longer than 7 digits and does not have '00' at the beginning of the number, then Complete Concierge removes number of digits defined in the **Country Wide Calls Remove first** parameter from the beginning of the called number. The purpose of this operation is to remove the so-called "national trunk prefix" from the phone number. In many countries it is '0' that must be dialed for the inter zone calls. So, the length of the "national trunk prefix" must be defined in the **Country Wide Calls Remove first** parameter. In most cases it will be 1.

D. If the called number length is shorter than 12 then Complete Concierge will put the prefix defined in the **Insert Numbers at begin** parameter at the beginning of the called number.

Once these actions have been performed, Complete Concierge will try to find a suitable tariff.

Example:
The PBX is located in Frankfurt, Germany. The PBX users need to dial 9 to get an outside line before dialing the outside numbers. In this case, the following parameters must be defined:

General Digits to remove (length of the outgoing line access code): 1

Country Wide Calls Remove first: 1

Insert Numbers at begin: 0049

The table below demonstrates the called number conversions that will be performed by Complete Concierge before looking up for a tariff.

Call Type	Dialed Number	Step A	Step B	Step C	Step D
Local call within the Frankfurt area	97823678	7823678	Tariff 7777777 will be used	n/a	n/a
National call to the Berlin zone in Germany	90305291234	0305291234 (9 is removed)	0305291234 (not changed)	305291234 (0 is removed)	0049305291234 (0049 added) 0049… tariff will be used
International call to UK	90044208345678	0044208345678 (9 is removed)	0044208345678 (not changed)	0044208345678 (not changed)	0044208345678 (not changed) 0044… tariff will be used

4.2.3.2   Creating/Modifying the Call Accounting Table

The Call Accounting table includes about 3000 of different country codes. During the first system configuration it is usually necessary to assign tariffs to the country codes. The recommended way to do it is to assign a tariff for all codes globally and then to change tariff for some specific country codes if necessary. This could be achieved by executing the following actions:

- Check the **Not use filter, set all zones** check-box
- Define a value in the **Price sell/minute** field and click on the **Setting price/zone** button
- Optionally you can define a value in the **Surcharge** field and then click on the corresponding **Setting price/zone** button. The **Surcharge** field defines a call completion payment that will be added to the calculated call cost. The call completion payment does not depend on the call duration.
- Select the desired **Price calculation method** and click on the **Setting Calc/Zone** button. Typically, the **1-per Minute** options should be selected.

Un-check the **Not use filter, set all zones** check-box to change country-specific values in the table. The **Zone** filter helps navigate within the table.

It is very important to define tariff for the local calls. As mentioned above, the dummy country code 7777777 is used for this purpose.

4.2.3.3   The "Country Search String" Column

As mentioned above, Complete Concierge looks for a corresponding tariff by comparing the called number with the prefix that appears in the **Country Search String** column. Therefore, it is important to define the correct **International Dialing Prefix** that appears at the beginning of each country code in this column.

It is possible define either "00" or "011" prefix for all of the country codes by clicking on the respective button (**Apply 00** or **Apply 011**).

4.2.4   The Guest Languages Tab

Use this tab to create a translation table between the PMS and the PBX language codes.

4.2.5   Synchronize PMS and the Complete Concierge Databases

The last step of the initial system configuration is the synchronization of information currently presented in the PMS database (e.g., room status, guest names, etc.) to the Complete Concierge database.

- Go to the **General Setup** tab.
- Click the **Database sync** button.

Now, messages transmitted between the PMS and Complete Concierge are displayed in the **Communication Info Tables** tab:

XORCOM Complete Concierge Configurator

| General Settings | Room Translation | Call Accounting Manager | **Communication Info Tables** | Call Detail Table | Guest Languages |

Stop Autorefresh   Counter for Buffer In :22   [   ]   SET   Counter for Buffer Out :15   [   ]   SET

id	buffer	date	exec
1	GI|RN101|GNFidelio, Mr. Micros|GLEA|GSN|R	12/08/19 07:01	12/08/19 07:01
2	PA|ASOK|DA120819|TI080030|RN101|P#1|R	12/08/19 08:00	12/08/19 08:00
3	PA|ASOK|DA120819|TI080315|RN101|P#2|R	12/08/19 08:03	12/08/19 08:03
4	PA|ASOK|DA120819|TI080429|RN101|P#3|R	12/08/19 08:04	12/08/19 08:04
5	PA|ASOK|DA120819|TI080644|RN101|P#4|R	12/08/19 08:06	12/08/19 08:06
6	RE|RN101|DNN|R	12/08/19 08:10	12/08/19 08:10
7	GO|RN101|GSN|R	12/08/19 08:10	12/08/19 08:10
8	PA|ASOK|DA120819|TI081024|RN101|P#5|R	12/08/19 08:10	12/08/19 08:10
9	PA|ASOK|DA120819|TI081352|RN101|P#6|R	12/08/19 08:14	12/08/19 08:14
10	PA|ASOK|DA120819|TI081946|RN101|P#7|R	12/08/19 08:19	12/08/19 08:19
11	PA|ASOK|DA120819|TI082145|RN101|P#8|R	12/08/19 08:21	12/08/19 08:21
12	PA|ASOK|DA120819|TI082617|RN101|P#9|R	12/08/19 08:26	12/08/19 08:26
13	GI|RN101|GNFidelio, Mr. Micros|GLEA|GSN|R	12/08/19 14:00	12/08/19 14:00
14	XL|RN101|MI|MT|DA120819|TI160159|G#1|R	12/08/19 14:02	12/08/19 14:02
15	WR|RN101|DA120819|TI160209|R	12/08/19 14:02	12/08/19 14:02
16	WC|RN101|DA120819|TI160230|R	12/08/19 14:02	12/08/19 14:02
17	RE|RN101|CS0|R	12/08/19 14:02	12/08/19 14:02
18	RE|RN101|CS3|R	12/08/19 14:02	12/08/19 14:02
19	RE|RN101|DNY|R	12/08/19 14:02	12/08/19 14:03
20	RE|RN101|DNN|R	12/08/19 14:03	12/08/19 14:03
21	RE|RN101|DNN|R	12/08/19 14:03	12/08/19 14:03
22	GO|RN101|GSN|R	12/08/19 14:03	12/08/19 14:03

ID	buffer	date	exec
1	RE|RN101|RS1|	12/08/19 08:00	12/08/19 08:00:0
2	PS|RN101|TA100|DA120819|TI080030|P#1|DD|	12/08/19 08:00	12/08/19 08:00:45
3	PS|RN101|TA100|DA120819|TI080315|P#2|DD|	12/08/19 08:03	12/08/19 08:03:26
4	PS|RN101|TA100|DA120819|TI080429|P#3|DD|	12/08/19 08:04	12/08/19 08:04:36
5	PS|RN101|TA100|DA120819|TI080644|P#4|DD|	12/08/19 08:06	12/08/19 08:06:52
6	PS|RN101|TA100|DA120819|TI081024|P#5|DD|	12/08/19 08:10	12/08/19 08:10:32
7	PS|RN101|TA100|DA120819|TI081352|P#6|DD|	12/08/19 08:14	12/08/19 08:14:02
8	PS|RN101|TA100|DA120819|TI081946|P#7|DD|	12/08/19 08:19	12/08/19 08:19:5
9	PS|RN101|TA100|DA120819|TI082145|P#8|DD|	12/08/19 08:21	12/08/19 08:21:54
10	PS|RN101|TA100|DA120819|TI082617|P#9|DD|	12/08/19 08:26	12/08/19 08:26:2
11	RE|RN101|RS1|	12/08/19 14:09	12/08/19 14:09:5
12	WR|RN101|DA120819|TI161600|	12/08/19 14:12	12/08/19 14:12:06
13	WC|RN101|DA|T||	12/08/19 14:16	12/08/19 14:16:45
14	WR|RN101|DA120819|TI141800|	12/08/19 14:17	12/08/19 14:17:19
15	WA|RN101|DA120819|TI141806|ASOK|	12/08/19 14:18	12/08/19 14:18:06

4.3   Complete Concierge Verification Tests

The following tests may be performed to verify the Complete Concierge and PBX configuration.

4.3.1   Calls from an Occupied Room

- In order to evaluate Complete Concierge without a PMS, it is possible to simulate check in of a guest in room number 101 by pressing **Ctrl+F3** in the Fidelio Demo PMS Interface.
- Make a call from this room to the reception. The guest name and the room number should appear on the reception telephone LCD screen.
- Unbar the room phone via the PMS (**Alt+F3** in the Fidelio Demo PMS Interface) and make an outbound call. The call should be established. Make sure that the guest account is properly billed.
- Bar the room phone via the PMS (**Alt+F4** in the Fidelio Demo PMS Interface) and make an outbound call. The call should be rejected. Then make a call to the reception. The call should be established.

4.3.2   Calls from a Vacant Room

- In order to evaluate Complete Concierge without a PMS, it is possible to simulate a check out of a guest from room number 101 by pressing **Ctrl+F4** in the Fidelio Demo PMS Interface.
- Make a call from this room to the reception. The guest name "Vacant" and the room number should appear on the LCD screen of the reception telephone.
- Make an outbound call. The call should be rejected.
- If voice mail is configured for this particular hotel installation, then make sure that the voicemail messages of the guest are deleted.

4.3.3   Room Change Operation

- Change the room of the guest using the PMS.
- Verify that the phone barring status is set correctly.
- The guest name should be assigned to the new room and the previous room should be vacant.
- The voice mail messages should have been deleted from the previous room voice mail box.

Note: The "room change" operation is not available in the Fidelio Demo PMS Interface.

4.3.4   Wake-up Calls

The wake-up calls work regardless of the room telephone status. Thus a wake-up call may be scheduled even for a barred phone or a phone that is set to DND mode from the PMS.
The wake-up calls may be scheduled either via the PMS or from a room phone.

In order to evaluate Complete Concierge without a PMS, it is possible to simulate a wakeup call order for room 101 by pressing **Ctrl+F7** in the Fidelio Demo PMS Interface.

- Check in a guest. Order a wake-up call via the PMS. Answer the wake-up call when the room telephone rings. Make sure that PMS received the correct wake-up call report from Complete Concierge.
- Order a wake-up call via the PMS and do not pick up the phone when it rings. After three attempts the wake-up call will be considered unsuccessful. Make sure that the PMS received the correct wake-up call report from Complete Concierge.
- Make sure that the wake-up calls work when ordered by dialing *68 from the room telephone. Check that the wake-up call request is registered in the PMS.

4.3.5   "Do Not Disturb" (DND)

- Set the DND mode for a room (**Alt+F5** in the Fidelio Demo PMS Interface). Make a call from reception to this room. The room telephone should not ring.
- Disable the DND mode for a room (**Alt+F6** in the Fidelio Demo PMS Interface). Make a call from reception to this room. The room telephone should ring.

It is also possible to enable/disable DND from the room telephone. The telephone DND button (if it exists) must be programmed to dial the corresponding FreePBX feature code (*76 by default). Alternatively, it is possible to dial the code from the telephone keypad.

4.3.6   Set the Room Maid Status

Room Maid Status can be changed by dialing ***1*** to ***6*** or #1# to #6# from the room telephone. The following statuses may be defined:

- 1 Dirty / occupied
- 2 Dirty / vacant
- 3 Clean / occupied
- 5 Clean / vacant
- 6 Inspected / vacant

5   More Information

Refer to the "Products" section in our Web site for more information about Complete Concierge. In addition, feel free to contact us using the details in the footer for more information.