A MITEL
PRODUCT
GUIDE

Unify OpenScape Business

OpenScape Business V3

Mitel SIP DECT Phone configuration guide
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Mitel

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1 Introduction

This guide describes the steps needed for the basic configuration of SIP-DECT 9.2 to interconnect with OpenScape Business V3 system.

The following chapters describe the basic steps for configuring SIP-DECT with the OpenScape Business system. The configuration settings below refer to SIP specific configuration.

For detailed information regarding the SIP DECT phones basic system setup and network you can refer to SIP DECT phones Mitel administration manuals.

1.1 Supported Features

The following features are supported in SIP DECT phones with OpenScape Business V3 communication system:

- Call transfer: unattended, attended, blind
- Call forward (CFU, CFNR, CFB)
- Call hold
- Call reject
- Call swap
- Call resume
- CLIR
- Call waiting
- Call log
- Call pickup group
- CLIP (Display the call number or name from caller)
- Consultation (via R key from SIP-DECT devices)
- Distinctive ringing (Different ringtones for internal, external and recall)
- MWI
- DTMF
- 3rd-party call control (make call, reject call, clear connection)
- Open Directory Service
- Standby OMM

The following restrictions apply for the supported features:

- Call forward (CFU, CFNR, CFB): Call forward can be activated on SIP-DECT device diversion information is present on display but destination is not shown.
- Call waiting: On SIP-DECT device Call waiting can be activated or deactivated. If Call Waiting is activated and second call is answered the third call received is notified but cannot be answered. Third call handling is not supported, will lead to unwanted transfer or alternate call if is signaled. The "third line" cannot be switched off.
- Call Pickup group: supported with min. version SIP-DECT V9.2 HF1. Call pickup notification presented on DECT device contains string "Call Back" and Feature access code for pickup as information.

  Two SIP-DECT configurable options available: Pickup tone – 5 knocking tones (default) Splash ring - pickup notification is signaled also acoustically to the user.

- 3rd-party call control (make call, reject call, clear connection): When Cordless-IP-User is used as 3rd party Call Control device (e.g. UC Smart), only Make Call, Reject call and Clear Call (Connection) are supported
- Call initiated from myPortal DECT device will ring for ~2s and auto-answer is activated afterward. After auto-answer SIP-DECT microphone is muted. Auto-answer timer is not configurable.
- Call log is not available is DECT device is out of range or powered off.

The telephony features that are not listed above are not supported. For example:

- Conference
- Do Not Disturb
- Reverse lookup for LDAP directories (Search type is "Surname")
- SIP-DECT messaging: SIP-DECT messaging between SIP-DECT devices and Desk phones e.g. CP
- SIP-DECT - Paging, vCard Receive, Locating
- SIP@home

For more information, you may refer to OpenScape Business V3 Administrator Documentation.

1.2 Software License

Make sure that the OpenScape Business licenses are assigned and activated to the SIP stations via the license management of the OpenScape Business Assistant (WBM) prior to SIP-DECT configuration.

Make sure that OpenScape Business license is assigned for Open Directory Service if OSBiz integrated LDAP based directory service is used.

2 SIP-DECT start up

Bellow steps describe a configuration example for initial setup of SIP-DECT. For detailed information, check SIP-DECT OM System Manual Administrator guide.

Before you start configuring the SIP DECT 9.2 phones with OpenScape Business system you have to configure the Open Mobility Manager IP network.

You can configure and register the SIP DECT phones with OpenScape Business system through the Open Mobility Manager.

2.1 Configuring the local DECT Base Station Configuration

To access the Open Mobility Manager you have to configure the local DECT Base Station through the Open Mobility Configurator tool.

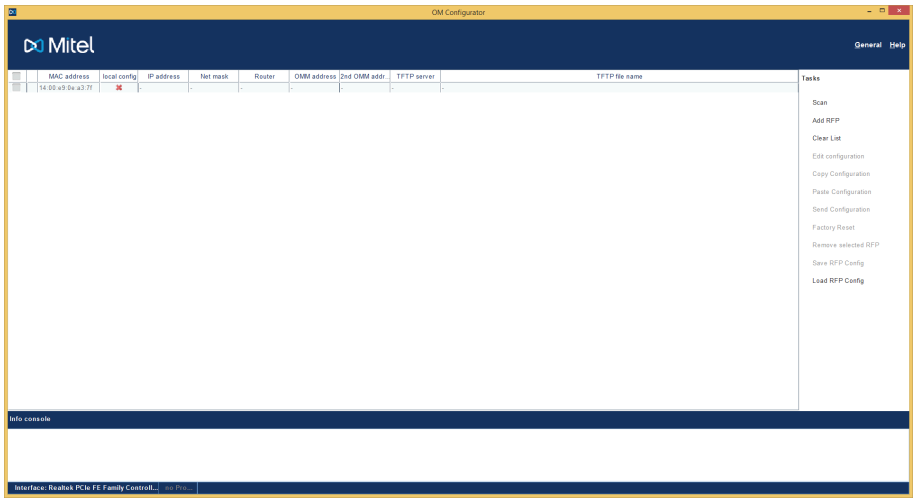
Prerequisites

You have to install Open Mobility Configurator tool.

Bellow example shows static IP address configuration, for other options e.g DHCP please check SIP-DECT OM System Manual.

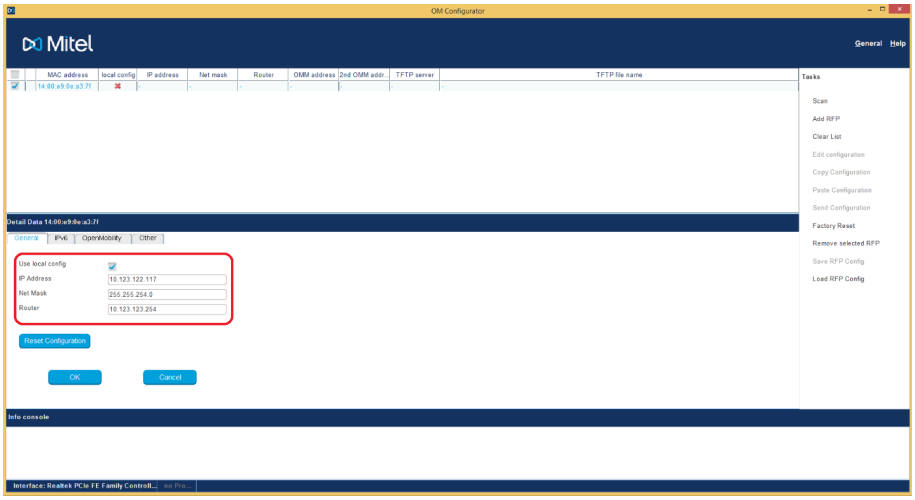
Step by Step

1) Connect the DECT base station(s) to your LAN and power up the units.
2) Open the Open Mobility Configurator and navigate to **General > Options** to select your network interface.
3) Click **Scan** to find the base stations connected to your LAN.
4) Enter the following credentials for the initial start up:
   a) **username**: omm
   b) **password**: omm
   c) Click **OK**.



5) Select a base station entry and double click for configuration.

6) In the **General** tab provide the following information:
   a) Select the **Use local config** option
   b) Enter the **IP Address** of the DECT base station
   c) Enter the **Net Mask**
   d) Enter the IP of the **Router**
   e) Click **OK**.



7) In the **OpenMobility** tab provide the following information:
   a) Enter the **OMM address** or OMM1 and OMM2 if active standby is required for OM Standby feature.
   b) Enter the **DNS addresses**.
   c) Click **OK**.
8) Click **Send Configuration** to apply the configuration to the DECT base station.

2.2 Accessing Open Mobility Manager

You can access the Open Mobility Manager as follows.

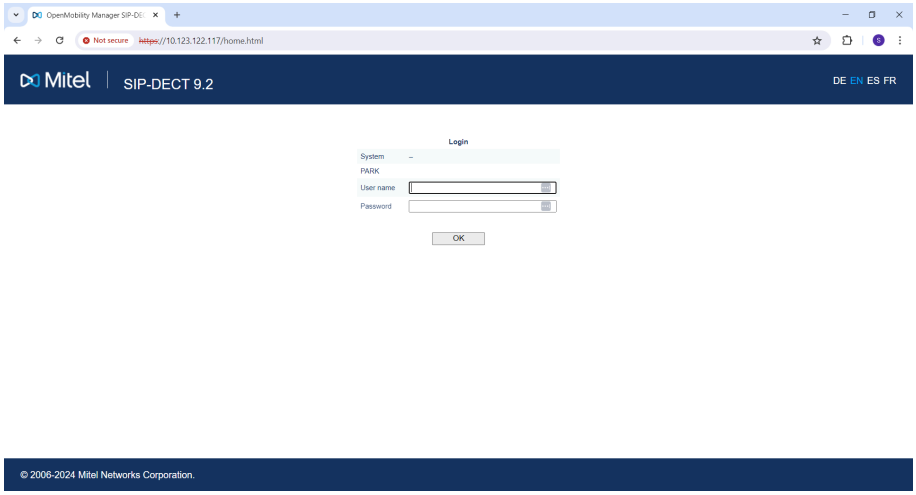
Step by Step

1) Enter the IP address of the base station that you have configured into a browser.

2) Enter the default credentials:

a) username: omm

b) password: omm



3) Click **OK**.

4) Click Accept to accept the End User License Agreement.

5) The first time that you login with the default credentials you have to change the password:

a) Navigate to **System > User Administration**.

b) Enter the new password in the **Password** field.

c) Enter gain the password in the **Password confirmation** field.

d) Click **OK**.

6) Navigate to **System Settings > Interfaces** and in the **Remote access** field enable the SSH access.

3 SIP-DECT licensing

Licenses are required based on the SIP-DECT system size and feature set. For small systems for up to 5 RFPs no license is required. For more details, check SIP-DECT OM System Manual chapter Licensing.

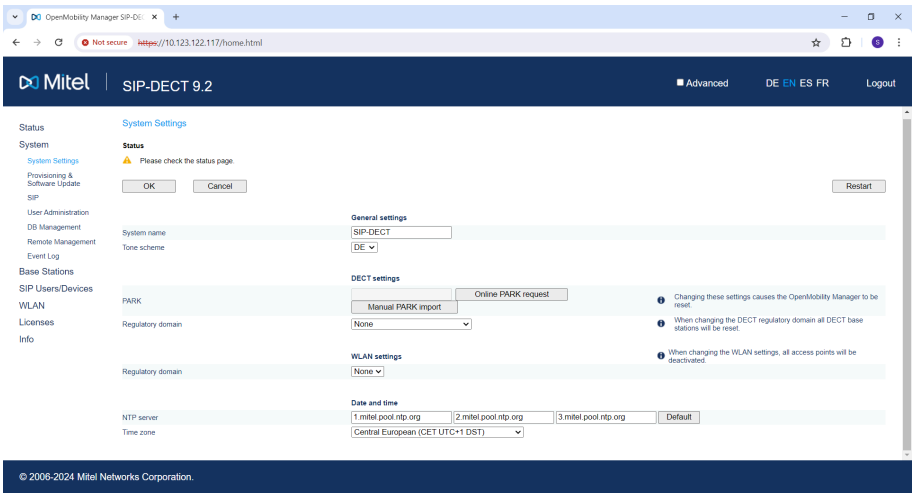
3.1 Configuring a Portable Access Rights Key

Licenses are required based on the SIP-DECT system size and feature set. For systems with up to 5 RFPs no license is required. For more details, check SIP-DECT OM System manual, chapter Licensing.

You have to configure a Portable Access Rights Key (PARK) to operate a SIP-DECT system with up to five DECT base stations.

Step by Step

1) Navigate to **System > System Settings** in the Open Mobility Manager.
2) In the **PARK** field select one of the following options:
   a) Click **Online PARK request** to generate a license-request file that contains the PARK code.
   b) Click **Offline PARK request**, if no internet connection is available. From the **PARK request file** download the request file by clicking **Save**. In the **Import PARK file** field select the PARK file and **Import** it into the OMM system.
   c) Follow the instructions provided to get a valid PARK from Mitels PARK Manager. Upload PARK file provided by Mitel PARK Manager into the OMM system.



3) In the **General settings > Regulatory domain** click on the drop down menu and select a domain.
4) Configure the **NTP server** if necessary.
5) Select a **Time zone** from the drop down menu.
6) Click **OK** at the top of the page.

3.2 Adding new base stations

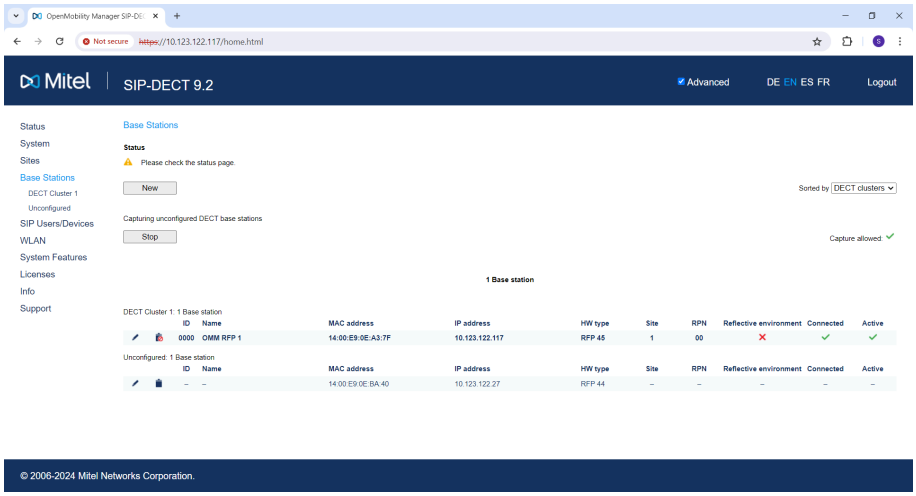
You can add new base stations from the base Stations menu.

Prerequisites

You have to perform steps described in chapter Configuring the local DECT Base Station Configuration on page 6 before you start adding new Base stations.

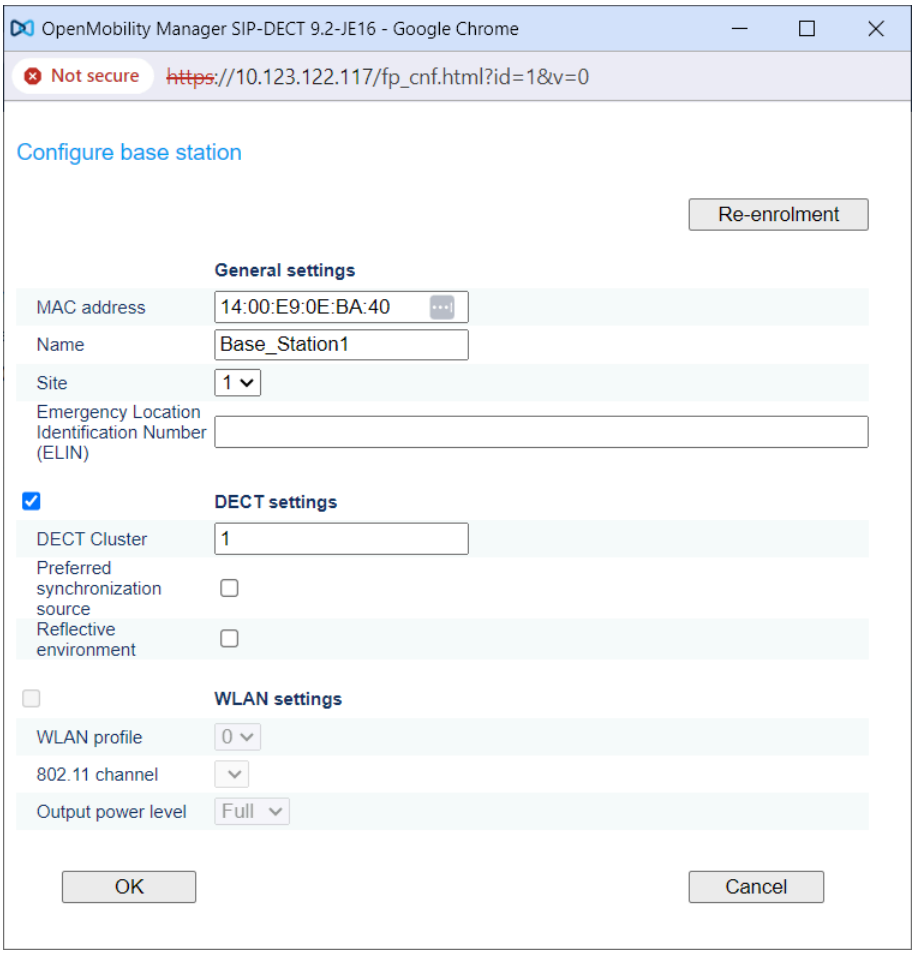
Step by Step

1) Navigate to **Base Stations** in the Open Mobility Manager.



2) Click **Capturing unconfigured base stations**.
3) Click **Edit RFP**, when new captured RFPs pop in the unconfigured section.

4) Click **Edit**.
   The **New base station** pop up window is displayed.



5) Enter the name information for the base station:
6) Enable the **DECT settings** by clicking on the check box and assign the DECT Cluster the RFP belongs to.
7) Click **OK**.

Upon successful configuration the new base station is displayed in the list with the connected and active Base Stations.

4 Basic SIP configuration

You can configure the basic SIP settings for the SIP DECT phones.

4.1 Configuring the Proxy server

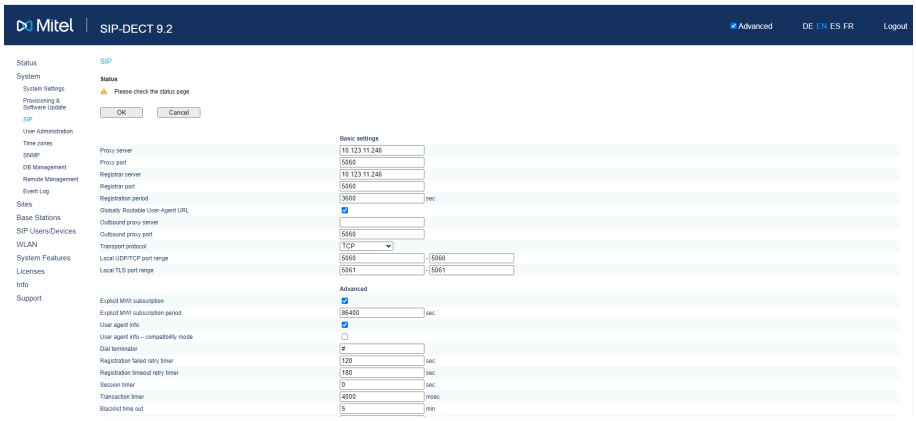
You can set an IP address for the SIP proxy server.

Prerequisites

The **Advanced** check box must be selected to access the following settings.

Step by Step

1) Navigate to **System > SIP** in the Open Mobility Manager.
2) In the **Proxy server**, enter the IP address of the OpenScape Business system.
3) In the **Registrar server**, enter the IP address of the OpenScape Business system.
4) Disable the **Microphone mute** option by clicking on the check box.
   By default this option is enabled.
5) Disable the **Send SIPS over TLS** option by clicking on the check box.
   Relevant only when transport protocol is set to TLS.
6) Click **OK**.



NOTICE: RTP settings from SIP menu should not contain only G.722 since G.722 codec is not supported by OpenScape Business X system if payload ends in the system, e.g. for calls to TDM, CMI devices, If calls has end-to-end payload then calls only with G722 is successful e.g. between two SIP-DECT devices.

4.2 Configuring Sites menu

Make sure that the SRTP of the site is disabled. SRTP is disabled by default

Step by Step

1) Navigate to **Sites** in the Open Mobility Manager.
2) Locate the site of your interest and click the edit button ( ).
3) Disable the SRTP parameter.

5 SIP Users/Devices

The SIP Users/Devices menu provides an overview of all configured SIP users and devices sorted by their phone number.

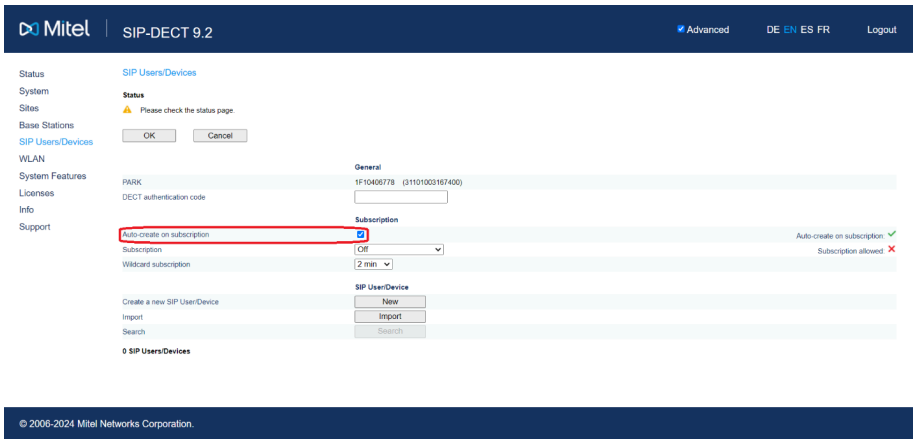
5.1 SIP-DECT subscription

Enable the following setting for SIP users:

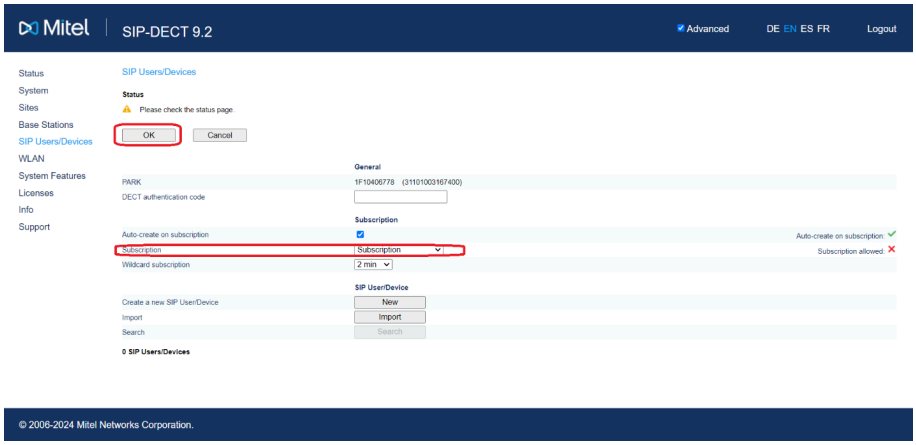
Step by Step

1) Navigate to **SIP Users/Devices** in the Open Mobility Manager.
2) Enable the **Auto-create on subscription** by clicking on the check box.

   Auto-create on subscription allows the automatic subscription of DECT phones, without any device administration. This subscription method creates an unbound device dataset. The device is mapped to a specific user dataset when the user logs in to the phone.



3) Select the **Subscription** option from the drop down menu in the **Subscription** field.



4) Click **OK**.

5.2 Adding new user

You can create new unbound SIP- DECT phone users.

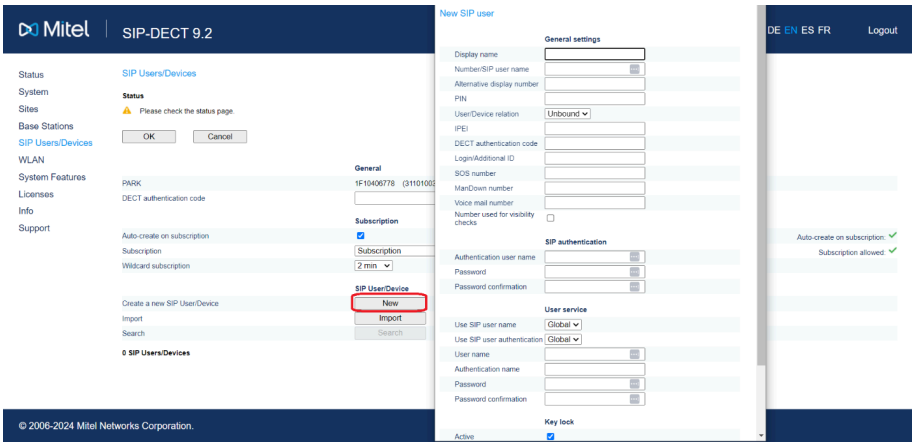
Only the mandatory parameters are described below.

Step by Step

1) Navigate to **SIP Users/Devices** in the Open Mobility Manager.

2) In the **Create a new SIP User/Device** field, click **New**.

The **New SIP user** pop window is displayed.



3) Enter the following required information in the **General settings** section:

a) **Display name**

b) **Number/SIP user name**

c) **PIN**

The PIN that is configured is used for DECT authentication of the phone on SIP-DECT system.

4) Enter the following required information in the **SIP authentication** section:

a) **User name**

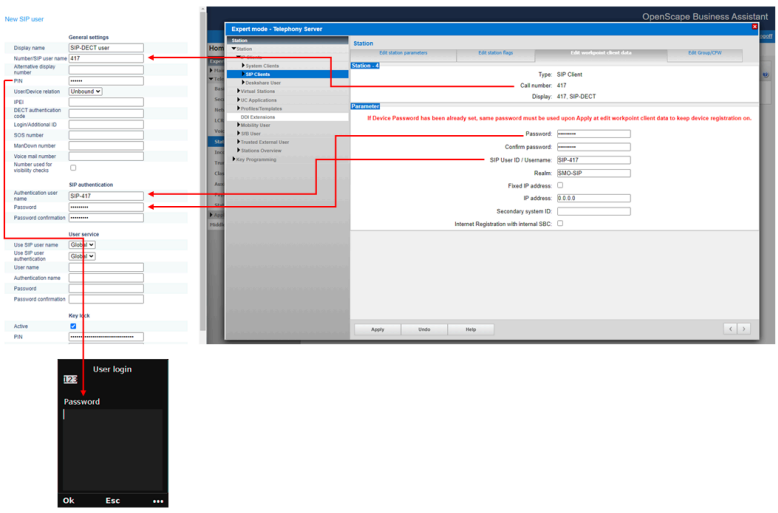
b) **Password/Password confirmation**

c) **User/Device Relation = unbound**

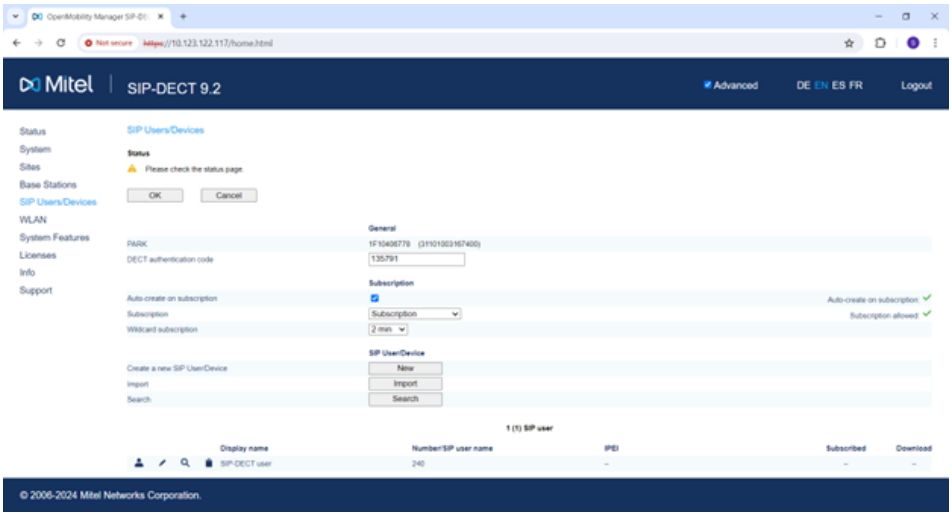
If no name is specified, the number will be used by default during SIP registration and authentication.

NOTICE: Alternative display number must not be configured.

See the example below for adding a new user:



The new user is added in the **SIP Users/Devices** list.



After successful SIP-DECT phone registration IPEI will be shown on SIP User/ Devices page.

6 System features workarounds and hits

6.1 Voicemail

You can configure a system-wide voicemail number or a user-specific voicemail number. The voicemail number is used by the DECT phone when a voice box call is initiated. The system-wide voice mail number can be overruled by a user specific voicemail number.

Prerequisites

The **Advanced** check box must be selected to access the following settings.

Check voice mail number configured in OpenScape Business Assistant system. Navigate to **Setup > Wizards > Central Telephony > Voicemail** and verify the voicemail number.

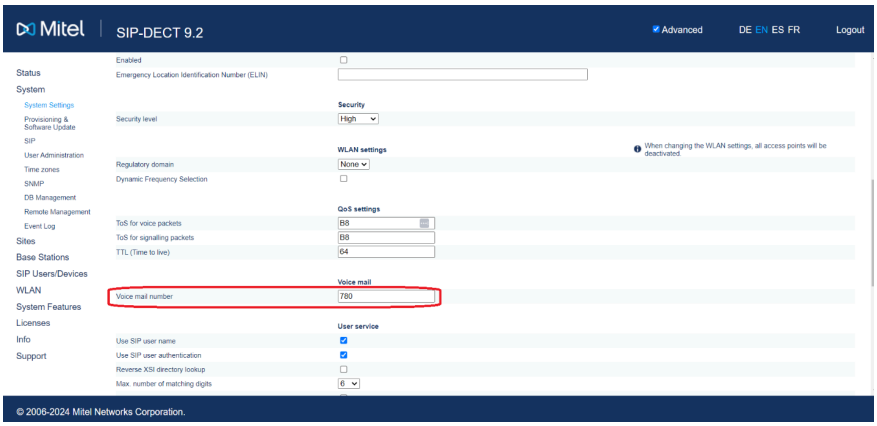
Step by Step

1) To activate a system-wide voicemail number proceed with the following configuration:

a) Navigate to **System > System Settings** in the Open Mobility Manager.

b) In the **Voice mail number** field, enter the phone number that is used when initiating a voice box call.

c) Click **OK**.



d) Navigate to **System > SIP** in Open Mobility Manager and activate **Explicit MWI subscription**.

Explicit MWI subscription period must be configured to 1800s.

2) To activate a user-specific voicemail number proceed with the following configuration:

a) Navigate to **SIP Users/Devices** in the Open Mobility Manager.

b) Select the user of your choice and click the edit button ( ).

c) Navigate to the **Voice mail number** parameter and enter the voicemal number.

6.2 Creating or updating directory entries

Open Directory Service (ODS) for OpenScape Business provides access to the internal user directory.

You can configure directory entries or update existing entries from the **Directory** menu.

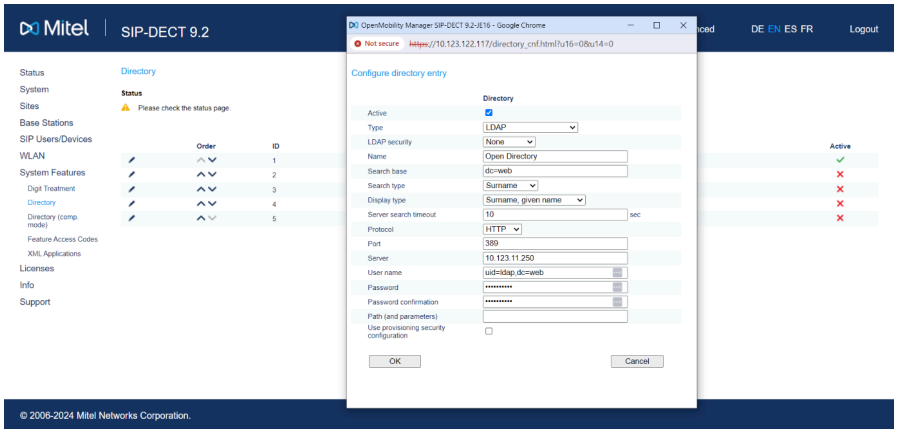
Open Directory Service can be configured in SIP-DECT as Directory and can be used to search for LDAP search for dial out.

Search is performed in the Surname.

Reverse lookup not supported.

Step by Step

1) Navigate to **System Features > Directory** in the Open Mobility Manager.
2) Click the pencil icon next an existing directory entry in the list.
   The **Configure directory entry** pop up window is displayed.



3) In the **Active** field, click on the check box to activate the directory.
4) In the **Type** field, select the type of directory from the drop down menu.
5) In the **Name** field, enter a name for the directory.
6) In the **LDAP Security** field, select the type of security form the drop down menu.
7) In the **Search base** field, specify the location form which the search begins.
8) In the **Display type** field, specify how the search results will be displayed.
9) In the **Server search timeout** field, enter the seconds during which the OMM waits for search results from the LDAP server.
   The possible values are between 1-10 seconds.
10) In the **Protocol** field, select the type of protocol to communicate with the directory server.
11) In the **Port** field, enter the port number for the LDAP directory server
12) In the **Server** field enter the Ip address of the LDAP directory.
13) In the **User name** field, enter the name of the account for the directory server access.
14) In the **Password** field, enter the password of the account for the directory server access.

15) Click **OK**.

For correct number format of dial out you may need to configure the **Digit treatment** . To do that navigate to **System Features > Digit treatment**.

6.3 Setting a Distinctive ring

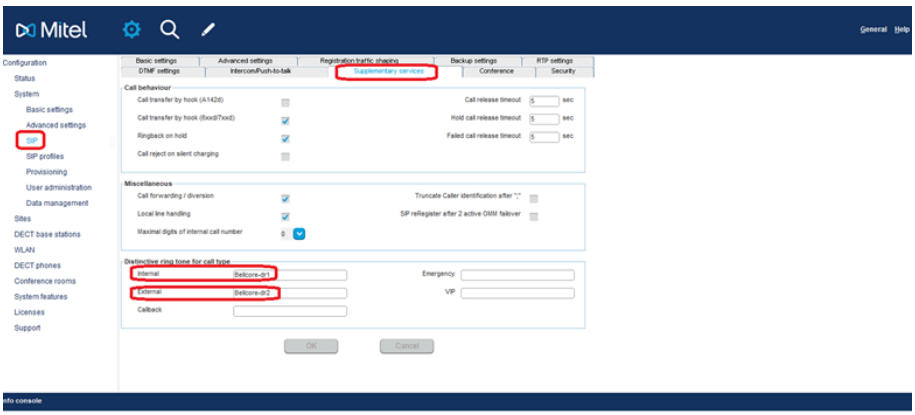
You can set a Distinctive ring tones can be set for call types.

Prerequisites

OM Management portal must be installed.

Step by Step

1) Navigate to **Configuration > System > SIP** in the OM Management portal .
2) Click on the **Supplementary Services** tab.
3) Navigate to the **Distinctive ring tone for call type** area.
4) In the **Internal** field, add Bellcore-dr1 for internal call.
5) In the **External** field, add Bellcore-dr2 for external call.
6) In the **Callback** field add Bellcore-dr3 for recall alerting.
7) Click **OK**.



6.4 Disabling conference calls

Conference calls are not supported in SIP-DECT phones with OpenScape Business system.

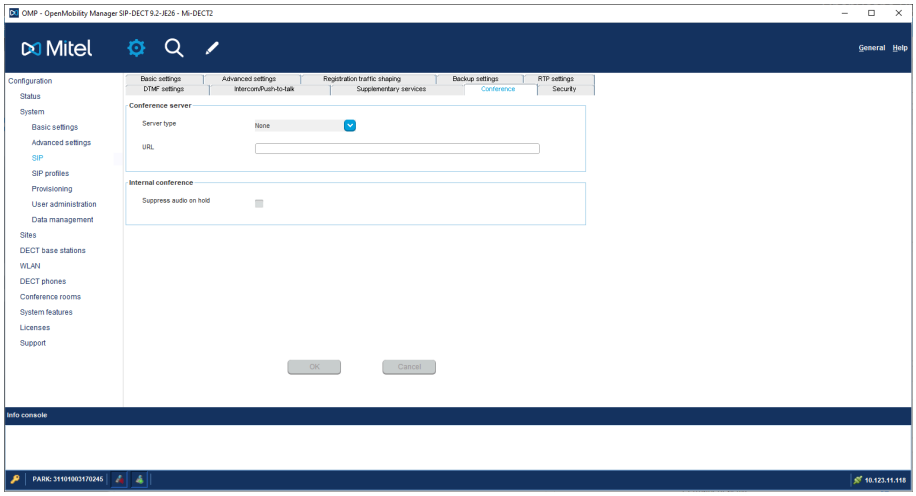
Prerequisites

OM Management portal must be installed.

You have to disable the conference option in the OM Management portal.

Step by Step

1) Navigate to **Configuration > System > SIP** in the OM Management portal.
2) Click on the **Conference** tab.
3) In the **Server type** field select the option **None** from the drop-down menu.



6.5 Configuring CoA profiles

You can import a variable list on the Mitel handsets with supported OpenScape Bussiness feature access codes.

Prerequisites

OM Management portal must be installed.

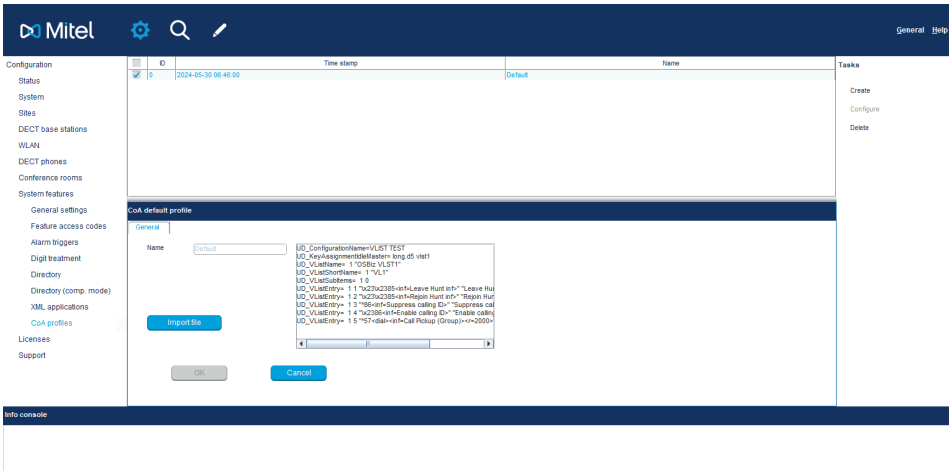
Step by Step

1) Navigate to **Configuration > System features > CoA profiles** in the OM Management portal .
2) Click **Create** in the **Tasks** list on the right-hand side of the CoA profiles window.

   The **New CoA profile** pop up window is displayed.
3) Configure the settings for the CoA profile:
   a) **Name**: Specify a name for the CoA profile
   b) **Default**: Indicate whether this is the default CoA profile that is used
   c) **ID**: Select an ID for the CoA profile from the drop-down menu.
4) Click **Import file** to import the CoA file.

   The new CoA profile is available in the **CoA profiles** page.

For example by long pressing Key 5 in the SIP-DECT device the following features are available:



CoA template Editing the CoA template requires a UTF-8 without BOM (byte order mark) editor.

For example:

UD_ConfigurationName=VLIST TEST

UD_KeyAssignmentIdleMaster= long.d5 vlst1

UD_KeyAssignmentIdleMaster= long.d5 vlst1

UD_VListName = 1 "OSBiz VLST1" # Titel

UD_VListShortName = 1 "VL1" # Softkey

UD_VListSubItems = 1 0

UD_VListEntry = 1 1 "\x23\x2385<inf=Leave Hunt inf>" "Leave Hunt group" "" "" ""

UD_VListEntry = 1 2 "\x23\x2385<inf=Rejoin Hunt inf>" "Rejoin Hunt group" "" "" ""

UD_VListEntry = 1 3 "*86<inf=Suppress calling ID>" "Suppress calling ID" "" ""

UD_VListEntry = 1 4 "\x2386<inf=Enable calling ID>" "Enable calling ID" "" ""

For detailed information, see Mitel SIP-DECT administration documentation.

6.6 Standby OMM

For SIP-DECT resiliency Standby OMM can be configured using OM Configurator tool. Check SIP DECT OM System Manual for more details.

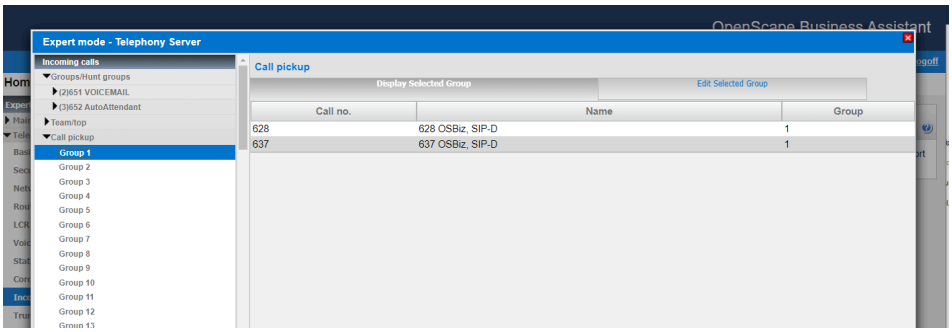
6.7 Pickup Group Notification

Call pickup groups are groups of stations in which each station is notified and can accept calls for the other stations in the group

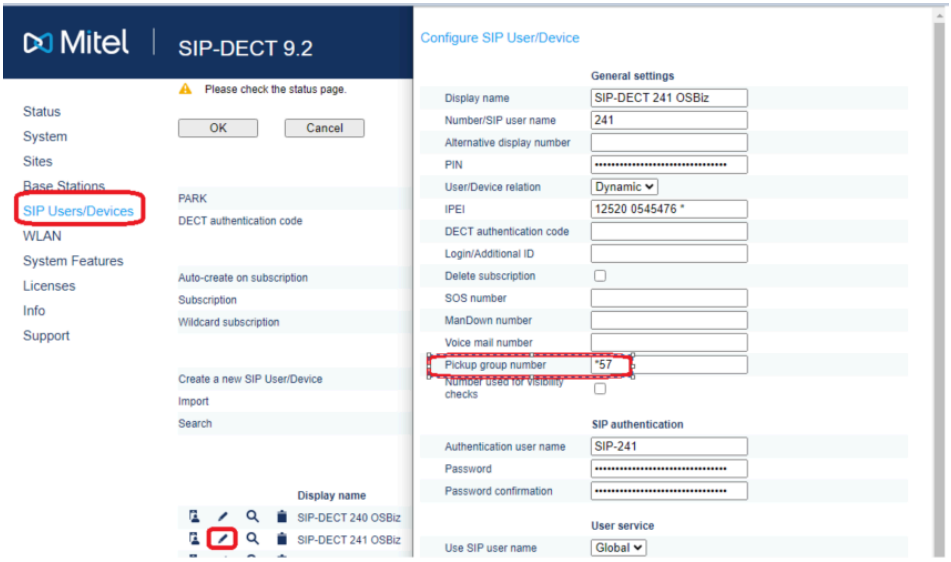
Pickup Group allows a member to be notified and answer a call on behalf of another member.

Administrator can activate Group pickup for each subscriber by Configuring pickup Feature code e.g. *57 default code for OpenScape Business beside OpenScape Business configuration.

Configuration example OpenScape Business



Configuration example SIP-DECT



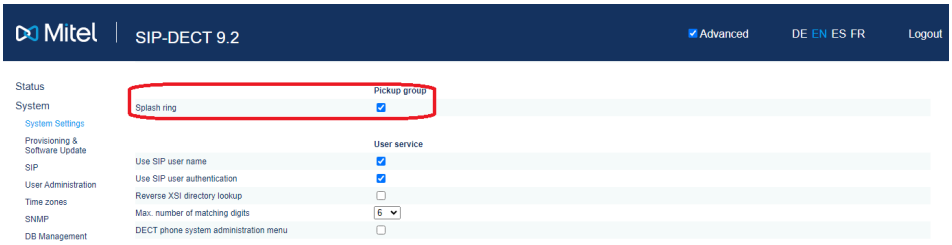
Beside display notification a pickup is signaled also acoustically to the user. Two SIP-DECT configurable options available by administrator:

Pickup tone – 5 knocking tones (default).

Splash ring - pickup notification is signaled also acoustically to the user for loud environment.

Configuration example:

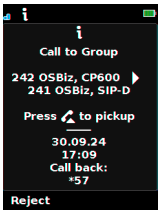
In OMM select Splash ring option from System, System Settings



The phone number or name of the subscriber originally called and the phone number or name of the caller are shown on the SIP-DECT Call Pickup notification.

Group Call can be picked up by pressing off hook key or ignored by pressing Reject Key.

If call is not picked up will not be shown in Caller list.



For more information, see OpenScape Business Administration manual.

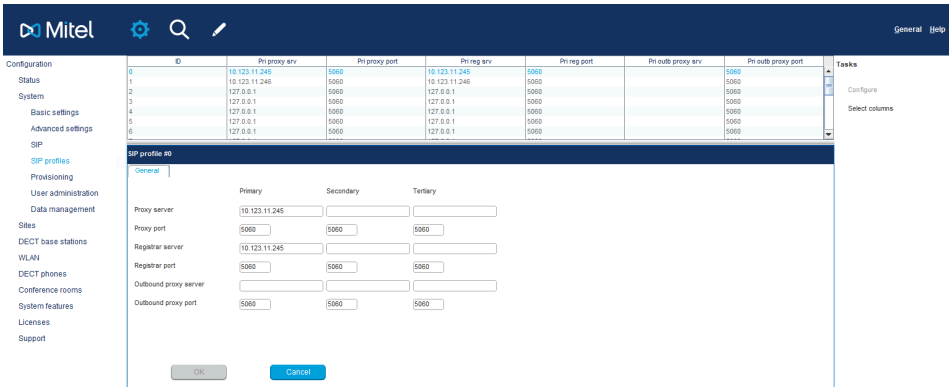
6.8 Multiple SIP profiles up to 20

By assigning a SIP-DECT user to such a SIP profile, the users of a SIP-DECT system can be distributed.

to the different OpenScape Business systems.

One SIP profile necessary for each OpenScape Business system. Each SIP profile has an unique identifier and will be assigned in SIP-DECT user configuration.

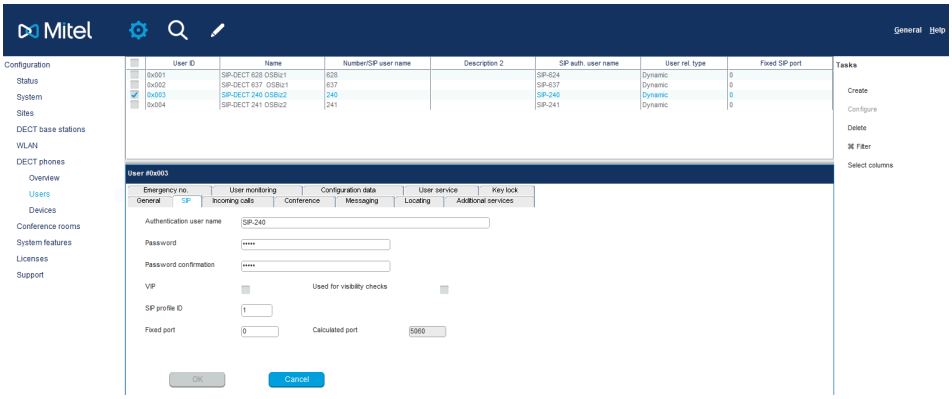
Example of SIP profiles configuration in OMP. OMP application must be installed first.



Unique identifier (ID) from 0 to 19. Default value of SIP profile ID is 0 therefore no.

The profile with the ID 0 corresponds to SIP Proxy / Registrar server configured in **System > SIP Basic > Settings** menu.

e.g. SIP-DECT assignment to a "SIP profile"



All profiles will share same configuration for Transport protocol.

Different Transport Protocol e.g. TLS can be configured in **System > SIP Basic > Settings** menu and this will apply to all profiles.

After Transport protocol is switched from TCP/UDP to TLS all proxy/registrar port settings with a 5060 value are automatically changed to 5061.