Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Funktel f.airnet Wireless IP-DECT SIP Solution with Avaya IP Office 10.0 in a Converged Voice over IP and Data Network - Issue 1.0

Abstract

These Application Notes describe a solution for supporting wireless interoperability between Funktel f.airnet Wireless IP-DECT with Avaya IP Office release 10.0.

Readers should pay attention to Section 2, in particular the scope of testing as outlined in **Section 2.1** as well as any observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps for provisioning Funktel's f.airnet IP-DECT solution to interoperate with Avaya IP Office. Funkel DECT handsets are configured on the IP Avaya Office as SIP Users, therefore enabling them to make/receive internal and PSTN/external calls and have full voicemail and other telephony facilities available on Avaya IP Office.

The Funktel f.airnet IP-DECT system is a modular solution for large and small deployments with full handover capabilities within one PBX. The Funktel IP-DECT Access points works as a conduit between the Avaya IP Office and the Funktel f.airnet IP-DECT wireless handsets. After the Funktel f.airnet IP-DECT wireless handsets register with the Funktel IP-DECT Access points, the Access points registers the handsets to Avaya IP Office.

2. General Test Approach and Test Results

The general test approach was to configure the f.airnet IP DECT handsets to communicate with Avaya IP Office (IP Office) as implemented on a customer's premises. The interoperability compliance testing evaluates the ability of the f.airnet IP DECT Handsets (DECT Handsets) to make and receive calls to and from Avaya H.323, SIP, Digital desk phones and PSTN endpoints. The integrated IP Office Voicemail was used to allow users leave voicemail messages and to demonstrate Message Waiting Indication and DTMF on the DECT Handsets. See **Figure 1** for a network diagram. The interoperability compliance test included both feature functionality and serviceability tests.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The testing included:

- Basic Calls, local and PSTN
- Hold and Retrieve
- Attended and Blind Transfer
- Call Forwarding Unconditional, No Reply and Busy
- Call Waiting
- Call Park/Pickup
- Do Not Disturb
- Calling Line Name/Identification
- Codec Support
- DTMF Support
- Hunt Groups
- Mobile Twinning

Avaya's formal testing and Declaration of Conformity is provided only on the headsets/handsets that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headsets/handsets to determine interoperability with Avaya telephones. However, Avaya does not conduct the testing of non-Avaya headsets/handsets for Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability, scalability or any regulation requirements. As a result, Avaya makes no representation whether a particular non-Avaya headset will work with Avaya's telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for handset interfaces, different manufacturers utilize different handset/headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

2.2. Test Results

Tests were performed to ensure full interoperability between Funktel f.airnet IP-DECT Solution and IP Office. The tests were all functional in nature and performance testing was not included. All the test cases passed successfully with the following observations.

- The functionality for allowing Message Waiting Indication to work on the handsets causes issues with the IP Office Server Edition and should not be activated.

2.3. Support

Technical support from Funktel can be obtained through the following:
Marcel Schwiebert
Phone: +49 5341 223 5313
E-mail: marcel.schwiebert@funktel.com
Web : www.funktel.com

3. Reference Configuration

Figure 1 illustrates the network topology used during compliance testing. The Avaya solution consists of an IP Office which the DECT Handsets were configured as SIP Users. Digital, H323 and Soft phones were configured on the IP Office. QSIG and SIP trunks were configured to connect to the PSTN. The Funktel Access points were connected to the IP Network which the IP-DECT Handsets register to. The Roaming Access point allows radio communication between the IP-DECT Handsets which in turn communicates with the IP Office.

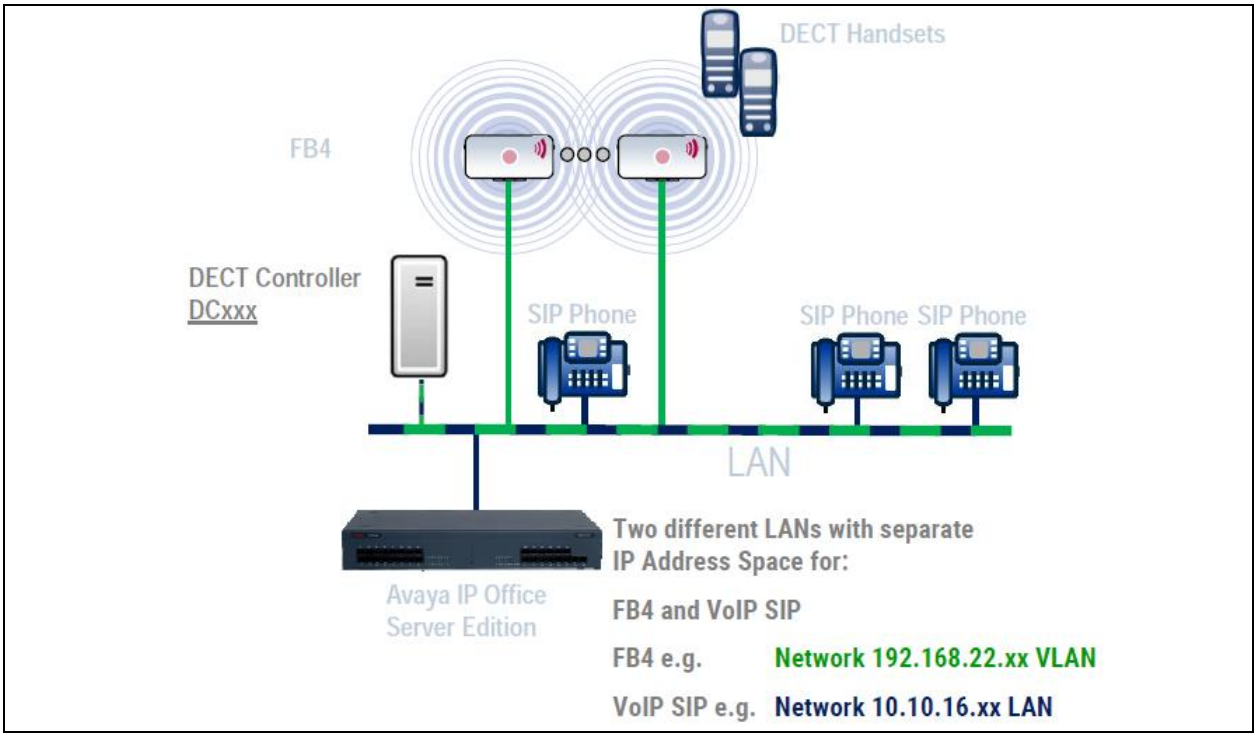


Figure 1: Avaya IP Office and Funktel f.airnet Reference Configuration

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Avaya Equipment	Software / Firmware Version
Avaya IP Office 500v2	10.0.0.0.0 Build 550
Avaya IP Office Manager	10.0.0.0.0 Build 550
Avaya 1616 IP Telephone	H323 3.2.5.0A
Avaya 2420 Digital Telephones	--
Avaya Communicator for Windows	2.1.3.0
Funktel Equipment	**Software / Firmware Version**
FC4 Handset	3.2.x
D11 light grey	3.2.x
FC11 (blue)	3.2.x
FB4 IP TP	V5.1.x
BSIP1 ikon IP DECT Basisst.	V5.1.x
DC 200 DoIP-Controller	5.1.x

Note: Compliance Testing is applicable when the tested solution is deployed with a standalone IP Office 500 V2 and also when deployed with IP Office Server Edition in all configurations.

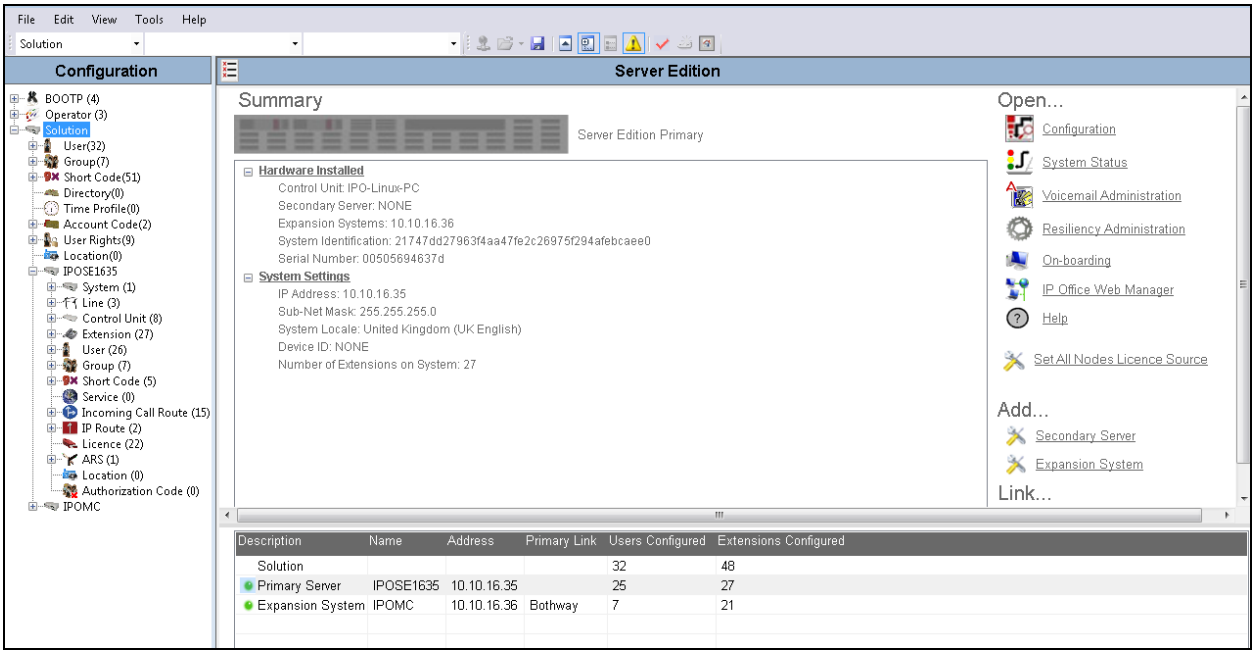
5. Avaya IP Office Configuration

Configuration and verification operations on the Avaya IP Office illustrated in this section were all performed using Avaya IP Office Manager. The information provided in this section describes the configuration of the Avaya IP Office for this solution. It is implied a working system is already in place. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**. The configuration operations described in this section can be summarized as follows:

- Launch Avaya IP Office Manager
- LAN1 Configuration
- VoIP Configuration
- Create a SIP Extension for the Funktel f.airnet DECT Handset
- Create a User for the Funktel f.airnet DECT Handset
- Verify the Voicemail Collect Short Code
- Save Configuration

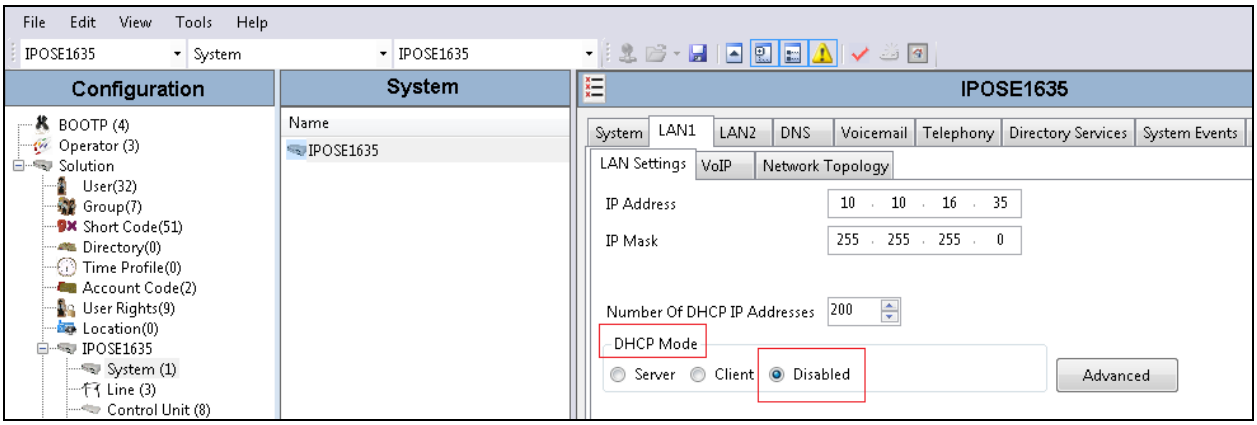
5.1. Launch Avaya IP Office Manager

From the Avaya IP Office Manager PC, go to **Start→Programs→IP Office→Manager** to launch the Manager application. Log in to Avaya IP Office using the appropriate credentials to receive its configuration (Not shown). In the IP Office window click on Configuration. During compliance testing the System was called IPOSE1635.



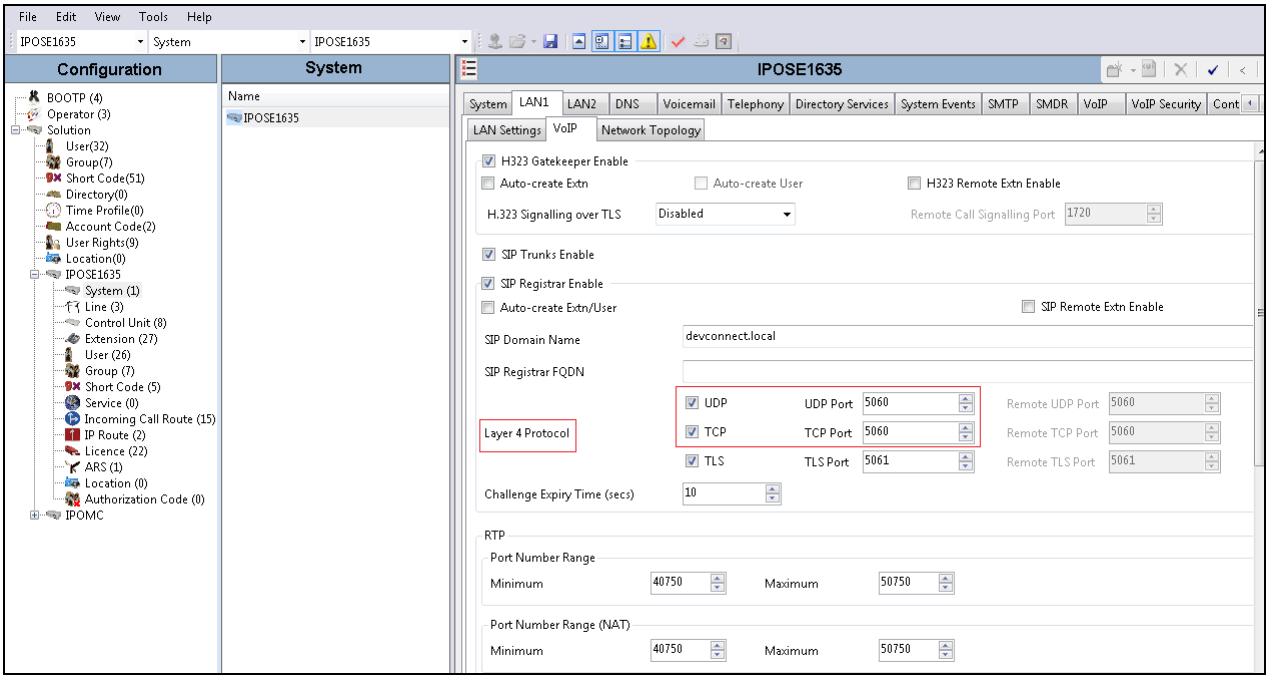
5.2. LAN1 configuration

For the Funktel f.airnet IP DECT handsets to communicate with the IP Office **DHCP MODE** must be disabled. To disable DHCP, select **IPOSE1635 → System (1)** then on the **LAN1** tab followed by the **LAN Settings** tab click on the **Disabled** radio button in the **DHCP Mode** section. Click the **OK** button to save.

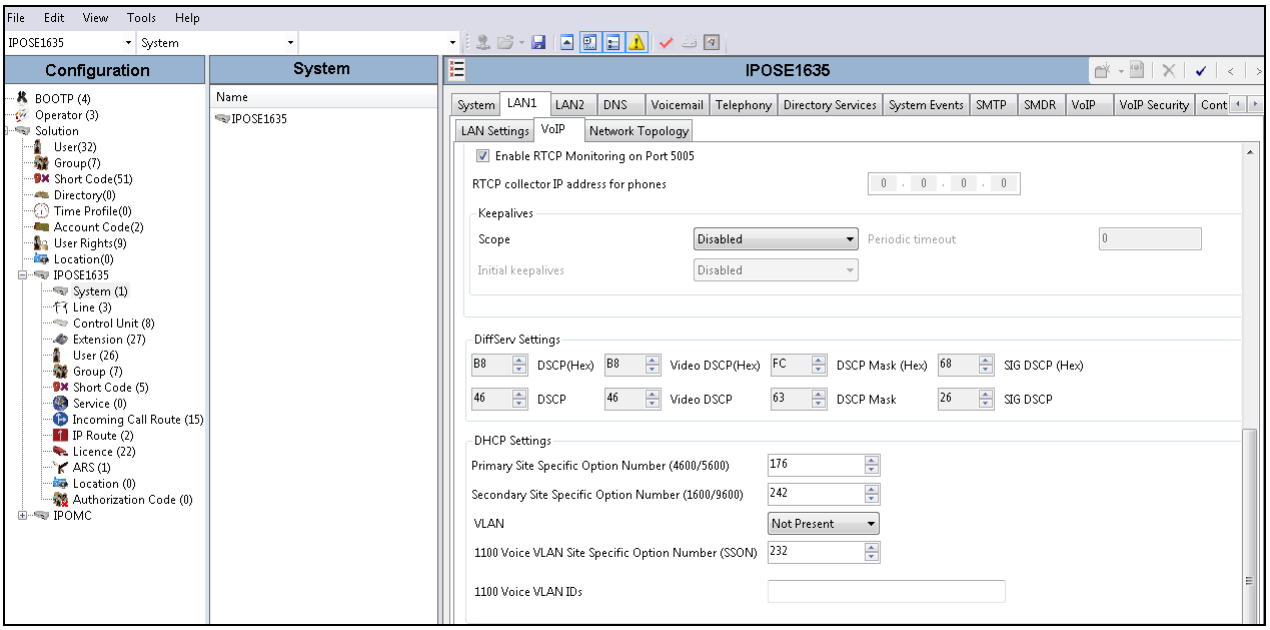


5.3. VoIP Configuration

Select the **VoIP** tab and in the **Layer 4 Protocol** section check the **UDP** and **TCP** Check boxes and select **5060** from both dropdown boxes. Using the scroll bar on the right hand side scroll down to the **DiffServ Settings** section.

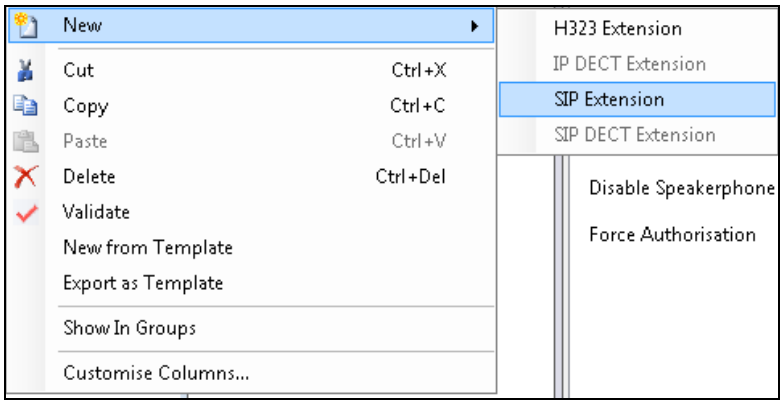


At the **DiffServ Settings** section select **46** from the **DSCP** drop down box and **26** from the **SIG DSCP** dropdown box. Click the **OK** button to save.

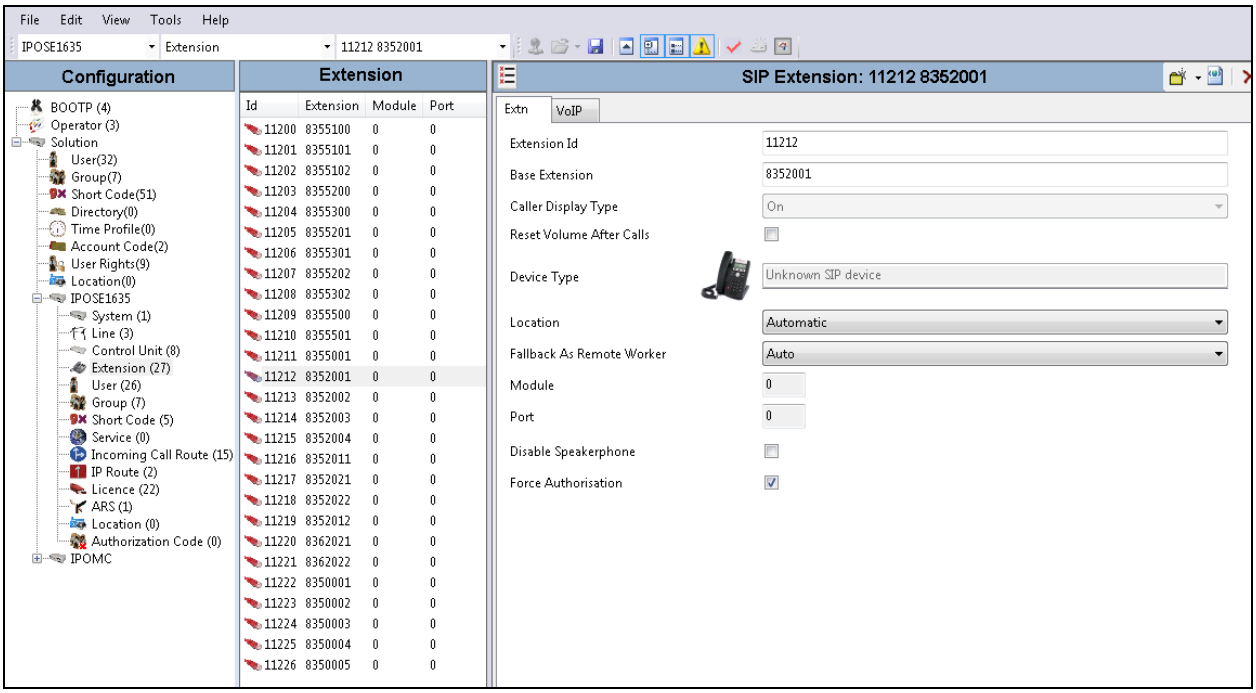


5.4. Create a SIP Extension for the Funktel f.airnet DECT Handset

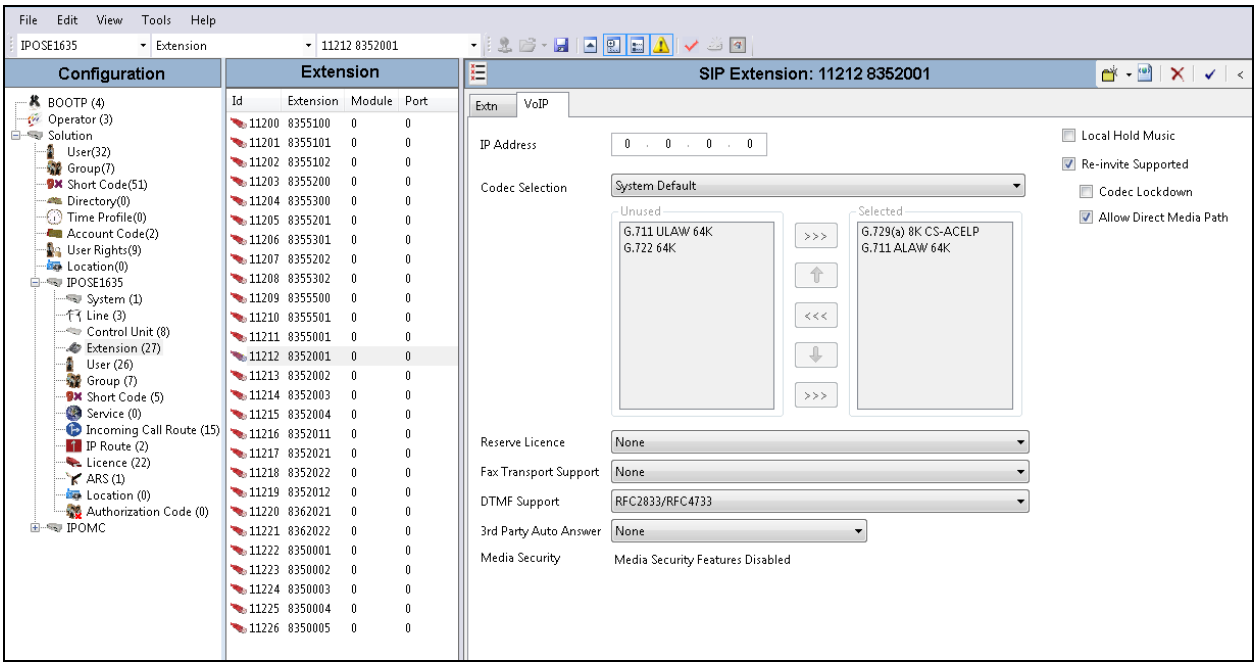
The DECT Handsets are configured as SIP Extensions on the IP Office. From the Configuration Tree click on **Extension** then right click and select **New** followed by **SIP Extension**. The example below shows an extension 8352001; repeat these steps for each DECT Handset extension.



When the new window opens enter the **Base Extension**. The Extension ID will be automatically filled in.

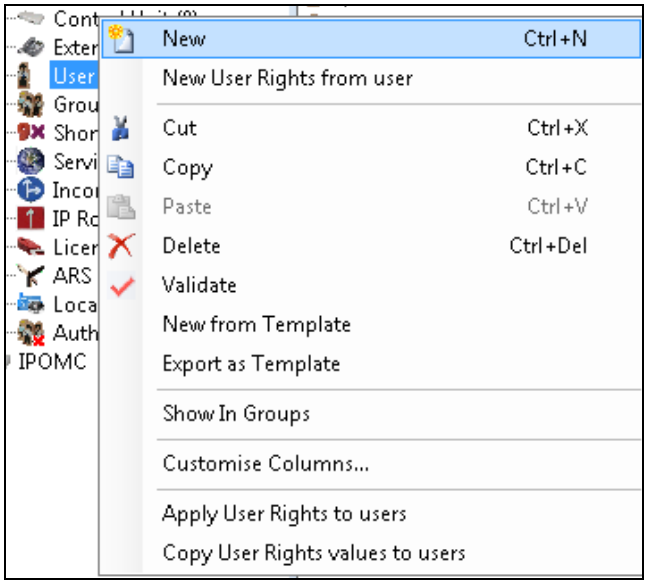


Click on the **VoIP** tab, and when the **VoIP** tab opens click the **Allow Direct Media Path** check box. Click the **OK** button to save.



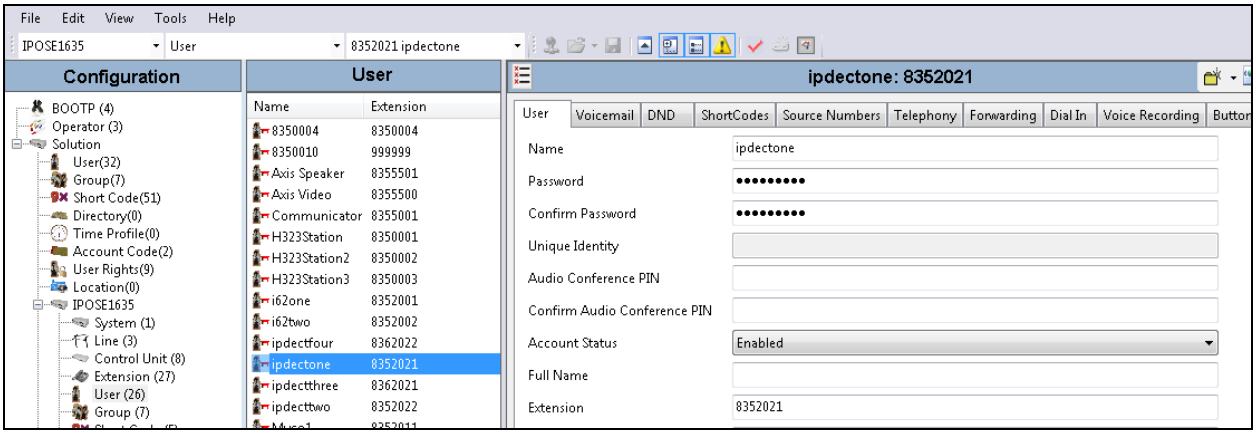
5.5. Create a User for the Funktel f.airnet DECT Handset

A user must be configured for all Funktel f.airnet DECT Handset Extensions. From the Configuration Tree click on **User** then right click and select **New**.

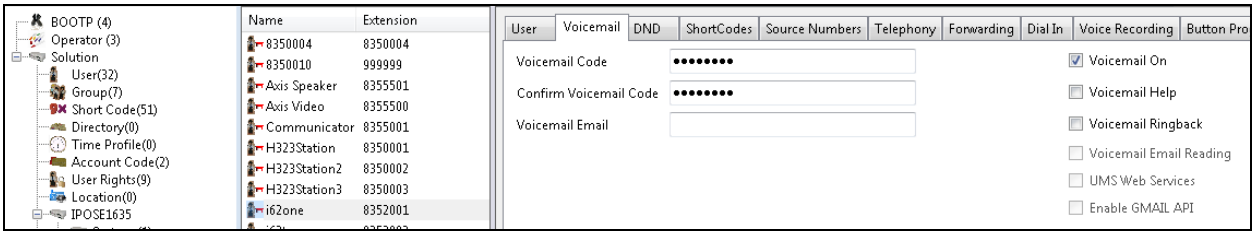


When the **User** window opens, select the User tab and enter the follow:

- **Name** Enter an name for this user, i.e. **ipdectone**
- **Password** Enter the Password
- **Confirm** Confirm the Password
- **Extension** Enter the Extension which was created previously, i.e. **6.1**

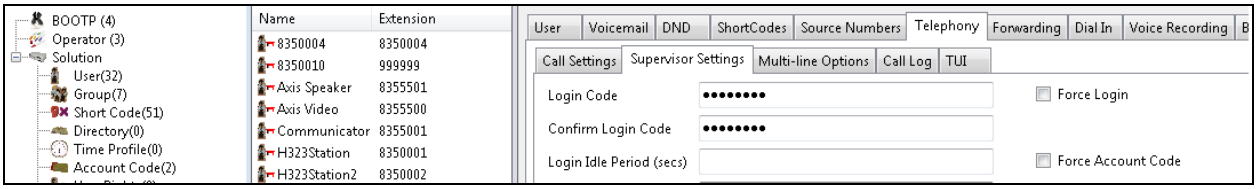


Click on the **Voicemail** tab, and check the **Voicemail On** check box and enter the **Voicemail Code** that will be used to access the user's mail box, and **Confirm the voicemail code**.



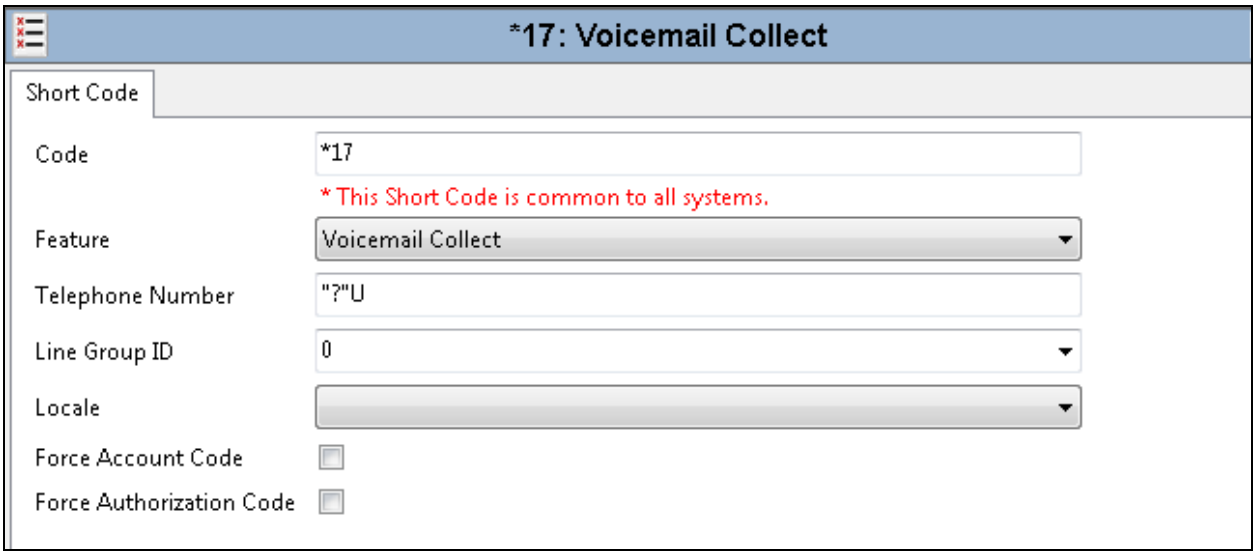
Click on **Telephony** tab followed by the **Supervisor Settings** tab and enter a Login Code in the **Login Code** box. Click the **OK** button to save.

Note: The Login Code is used by the Funktel f.airnet DECT Handset to log in to the IP Office in **Section 6**. Ensure all DECT Handset Users use the same **Login Code**.



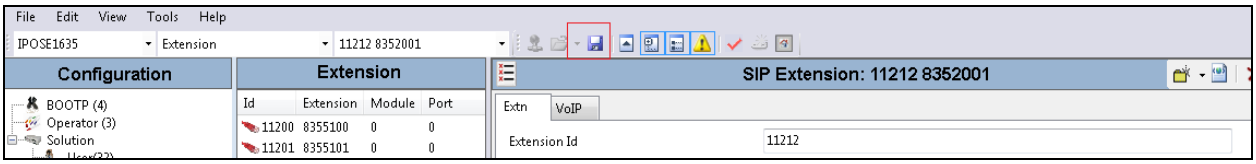
5.6. Verify the Voicemail Collect Short Code

As part of the Funktel f.airnet IP-DECT Base Station configuration the Voicemail access number is required. During compliance testing this **Feature** was set to **Voicemail Collect**, and the **Code** was ***17** also the **Telephone Number** was **"?"U**.

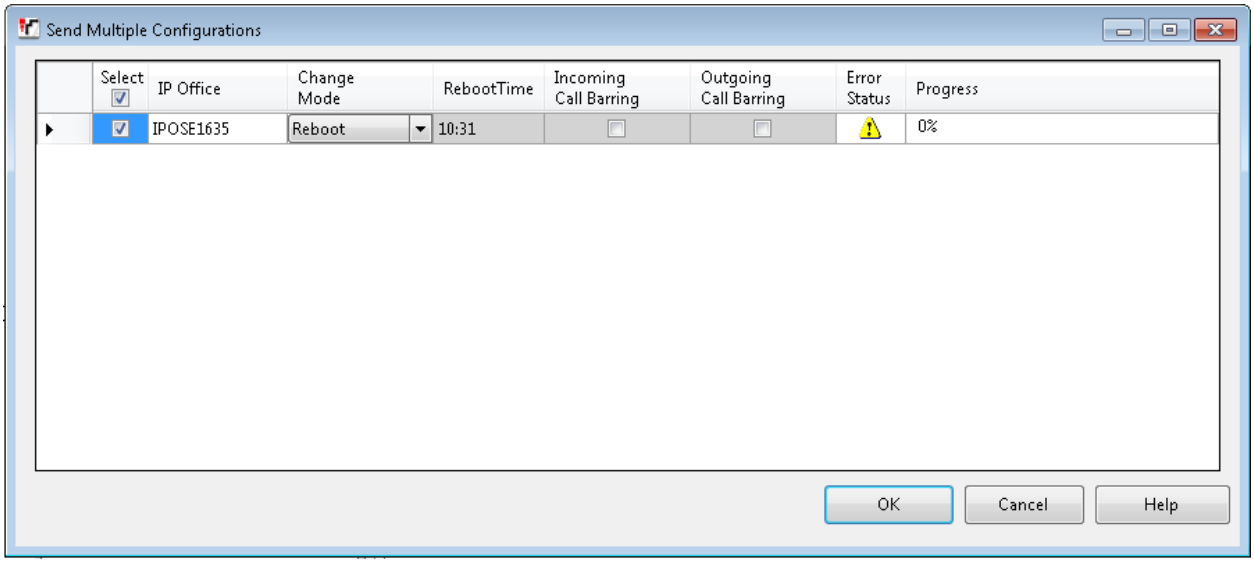


5.7. Save Configuration

Once all the configurations have been made it must be sent to the IP Office. Click on the **Save** Icon as shown below.



Once the **Save Configuration** Window opens, click the **OK** button.

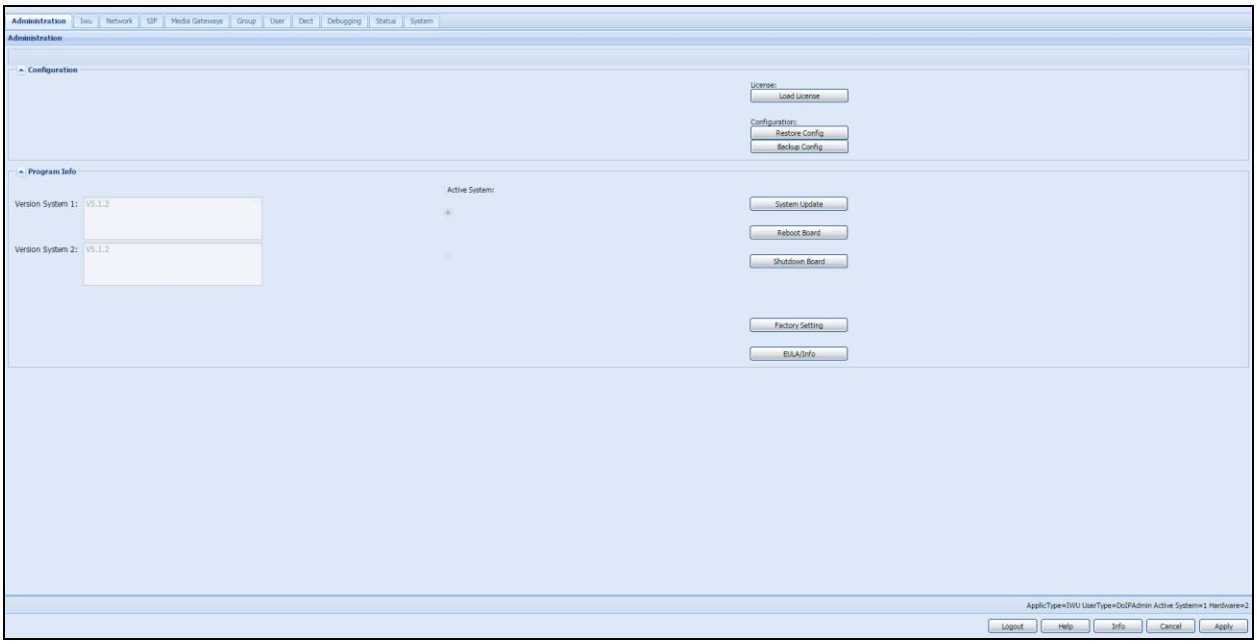


6. Configure Funktel f.airnet DECT

6.1. Configure a DECT Controller

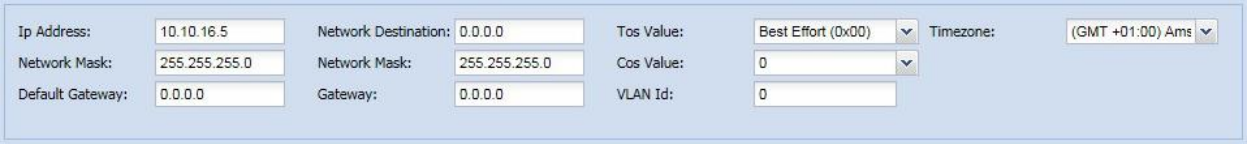
The DECT Controller is accessible via its factory default IP address 192.168.2.1. To access the controller WBM configure an IP address in the network 92.168.2.0/255.255.255.0, e.g. 192.168.2.101 on your maintenance PC. If the IP address 192.168.2.1 is already used in your network, directly connect the maintenance PC and the DECT Controller via Ethernet. This may be accomplished by using a direct Ethernet cable or via a separate Ethernet switch where only the maintenance PC and the DECT Controller are connected.
Test via ping, if the DECT Controller is replying to the ping requests (ping 192.168.2.1). If not, check all cabling, switch settings, (e.g. VLAN configuration). Ensure that the configured local IP of the maintenance PC address is up (e.g. ping 192.168.2.101).
Start the Web browser at the maintenance PC.
Access the WBM (web based management) at the following URL: http://192.168.2.1
Log in to the WBM with appropriate credentials:

Press the **Login** button (not shown). The configuration page for the IP-DECT System Server appears



6.2. Configuration of VoIP (Infrastructure) Network

Since configuration of the IP VoIP (Infrastructure) Network settings requires a reboot of the DECT Controller, these settings are configured initially.
To allow direct IP communication between the DECT Controller and the PBX both devices have to be located in the same IP network. Therefore it is necessary to change the IP address of the DECT Controller to the network of the VoIP (Infrastructure). You need at least one unused IP address of the Infrastructure network, which has to be configured on the DECT Controller.
Select the **configuration page Network** (not shown)**.**
Change the configuration in the bottom frame to the designated values of the DECT Controller.



Change the following values as needed:

IP address

Configure the IP address where the DECT Controller should be available inside the VoIP (Infrastructure) Network.
This configuration example uses ip address 10.10.16.5.

Network mask

Enter the corresponding netmask for the IP address as configured above. (Default for Class C networks: 255.255.255.0). This configuration example uses the network mask 255.255.255.0.

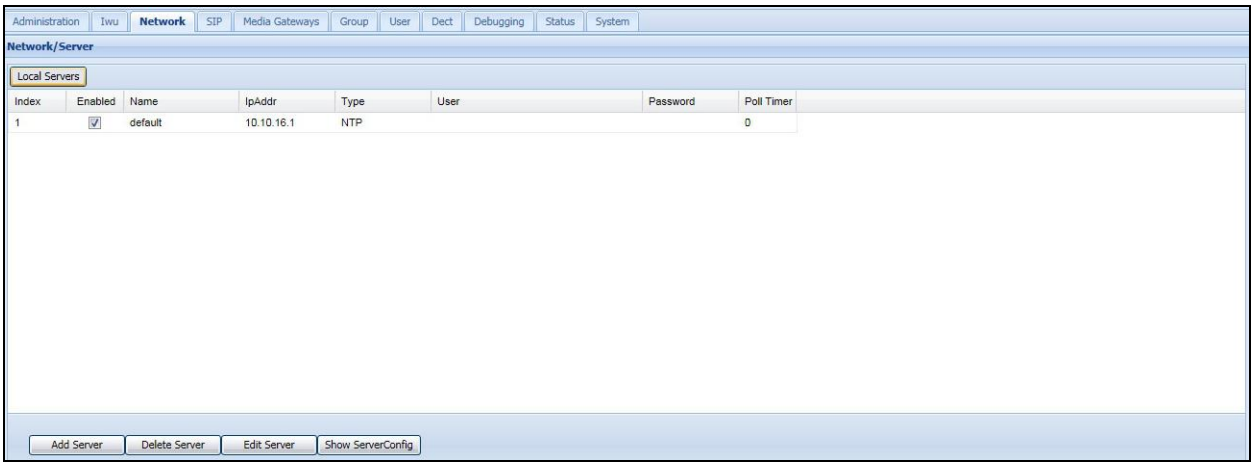
Routing Configuration

If routing to another network is necessary (e.g. access from Maintenance PC to IP VoIP (Infrastructure) network) or if infrastructure components (e.g. PBX, NTP servers) are located behind other routers, routing may be configured using a **Default Gateway** or by a specific network route (**Network destination**).
The usage of a **Default gateway** is the **recommended** routing method.
Using the method Network destination, the values for Network destination, Network mask and Gateway have to be configured. For the Maintenance PC a corresponding route has to be configured. This configuration example uses the Default Gateway IP address 0.0.0.0.

Time Server IP

The time settings have to be set according an NTP (or SNTP) time server. After activating the NTP Server, it may take some minutes upon activation of the NTP service. This is due to the nature of time synchronization between NTP server and NTP client.
The Server has a built-in hardware clock, However, usage of an accurate time by using NTP is suggested..
Set the Time zone to an appropriate zone (e.g. " (GMT +01:00) Amsterdam, Berlin, Rome, Stockholm, Vienna").

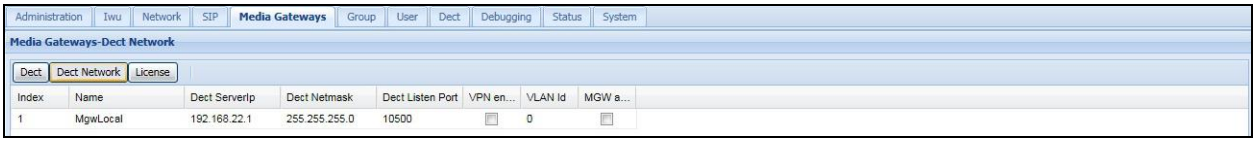
Switch to configuration page **Network → Local Servers.**
Add an NTP server entry by clicking on **Add Server**
Enable the new entry, configure the IP address of the NTP Server under **IpAddr**, select **NTP** under Type. All other filed in this row may be left unchanged.



Important: *Ensure that the **ip configuration** is configured **correctly**. Otherwise - after rebooting the DECT Controller - it may not be accessible without resetting it to its factory defaults (which have a fixed IP setting of 192.168.1.1 or 192.168.2.1).*

6.3. Configuration of DECT Network

Since configuration of the DECT Network settings requires a reboot of the DECT Controller, the settings are configured before the DECT Controller hardware is attached to the designated network segment.
Select configuration page **Media Gateways → Dect Network.**



Change the configuration of entry **MgwLocal** in the table to the designated values of the DECT Controller.

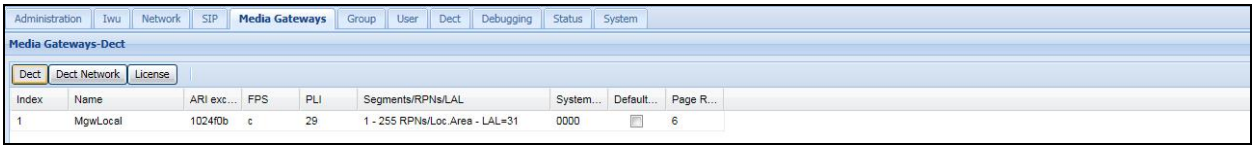
Dect ServerIp

This field contains the IP address of the server (the DECT Controller) in the DECT network. It is used for communication between all DECT base stations and the DECT Controller. This configuration example uses the Server IP address 192.168.22.1.

Dect Netmask

In this field the corresponding network mask which is assigned to the Server Ip address is configured. (The default value for a Class-C network is 255.255.255.0). This configuration example uses the network mask 255.255.255.0.

Select configuration page **Media Gateways → Dect**.



ARI excl FPS, FPS

In the fields **ARI excl FPS** and **FPS** the System ARI (DECT ID) which has to be unique at each DECT system is configured. The System Ari is provided by the license dongle. Supported System Ari classes are Class B Ari.
Note: All handset registrations are bound to a specific System ARI. If the System ARI is changed, all handsets lose their registration at the DECT Controller. To achieve system functionality, the handsets have to be registered again at the DECT Controller.

ARI excl FPS = **1024f0b**
FPS = **7**
This configuration example uses the System ARI 1024f0b.

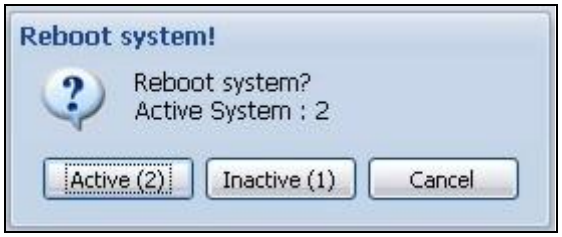
System Pin

The default **PIN** is a 8-digit number and it is needed for the registration of handsets. It is preconfigured with "00000000" and may be configured system wide here. You can change the system pin to another decimal value. This configuration example uses the System Pin **1234**.
Apply the changes by clicking **Apply** at the bottom section (not shown).

As stated above, for the changes to become active, the DECT Controller must be rebooted.

Important: *After rebooting, the DECT Controller will not be accessible by its the IP address 192.168.2.1 anymore. Instead it is accessible by the IP address of the IP VoIP (Infrastructure) Network (configured at the step above). If you have attached the DECT Controller directly via an Ethernet cable you have to attach the DECT Controller physically to the designated network segment* ***after rebooting*** *it.*

Select the configuration page **Administration** (not shown).
Initiate the reboot by clicking on the **left button** which is labeled **Active (x)**. The "x" is a placeholder for the active partition number, in this example x=2.



Start the reboot process by clicking on button **Active (2)**, if the current active partition is System 2 (as this example used - see output of **Active System:**).
Wait about 2 minutes for the DECT Controller to come up again.
Access the WBM (Web based management) by the IP address you have configured before for the IP VoIP (Infrastructure) Network.

6.4. Configuration of Users at the PBX

It is assumed that the VoIP users at the PBX are already configured.

6.5. Configuration of Users at the DECT Controller.

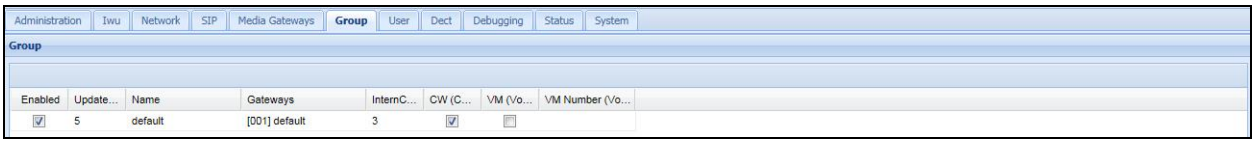
This section describes the Gateway and Group configuration required for each user.
Access the WBM of the DECT Controller via the web browser on the maintenance PC.
Example: **http://192.168.100.10**
Log in to the WBM with appropriate credentials
Switch to configuration page **SIP → General**.
Add a new gateway entry by clicking on the button **Add Gateway**(not shown).

Change the following values:

Gateway Type

Leave the **Gateway Type** as **Default**. Change the preconfigured **SIP Server Id** from 0.0.0.0 to the IP address of the PBX and the corresponding **Netmask**.

Switch to configuration page **Group**
Groups are the connecting link between **Gateways** and VoIP Users. A User is assigned to a Group and a Group is assigned to a **Gateway**.
Add a new group by clicking on the button **Add Group** (not shown).



Name

Change the preconfigured name of the Group (e.g. to the name of the corresponding PBX). This name is only used for the internal configuration of the DECT Controller Software. This configuration example uses the default Group name "default".

Gateways

Select the gateway from the dropdown field which you have configured in the last step.

InternCallLength

With this setting the maximum number of digits of the calling Party number for internal calls is configured. Calls with a larger number of digits are signaled as external calls at the handset. The default value is "3".

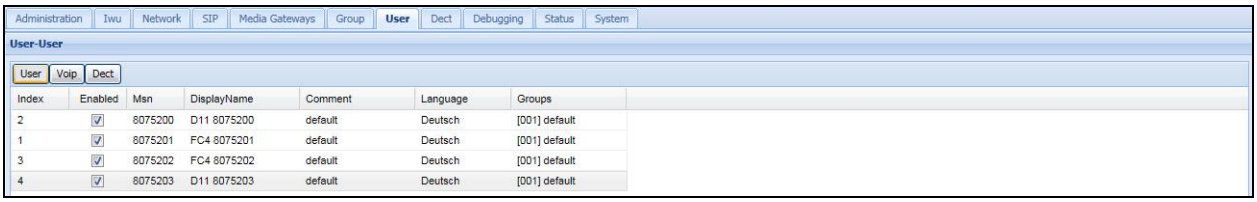
Note: *Alternatively it is possible to register several users at once using the Bulk Registration Mode (see "Multi-Register (Bulk Registering) of Handsets"). Since this method is out of scope of a quick start, the manual method is used here.*

Switch to configuration page **User**, sub page User (User → User).

- Set up one or several **Users** according the user configuration at the **PBX** for the connection with the DECT Controller. Please take care of the consistency of the entries between the PBX and the DECT Controller.

Add a new user by clicking on the button **Add User**(not shown).

*Note: To add a new user entry (even during running system services) it is necessary to select an existing user (otherwise an error message will appear) and then click on button **Add User**(not shown). A new entry with default values is inserted above the selected user entry.*



Change the contents of the following fields:

MSN (necessary)

The MSN has to correlate with the Call number of the User at the PBX. This configuration example uses MSN 8075200, 8075201, 8075202 and 8075203.

DisplayName (necessary)

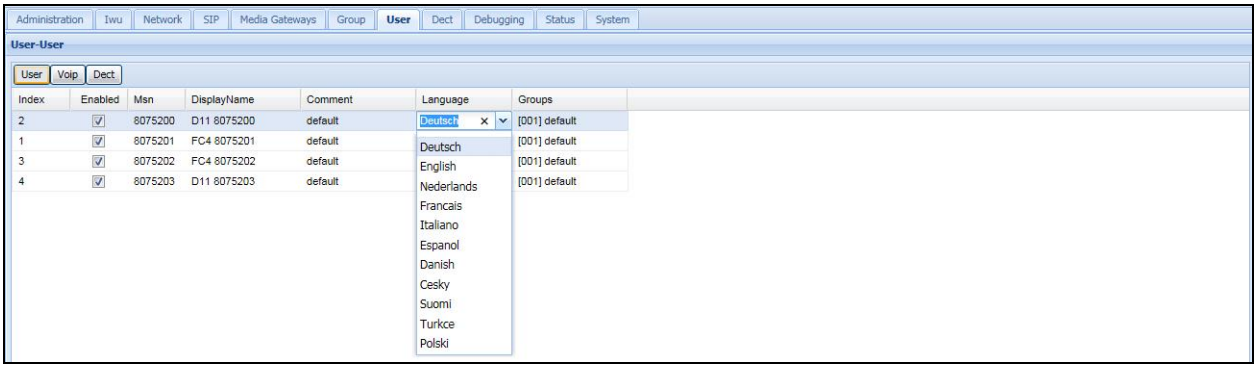
This information is shown at the idle display of the corresponding handset. This configuration example uses MSN D11 8075200, FC4 8075201, FC4 8075202 and D11 8075203.

Comment (optional)

Here you may enter any desired text for administration purposes.

Language

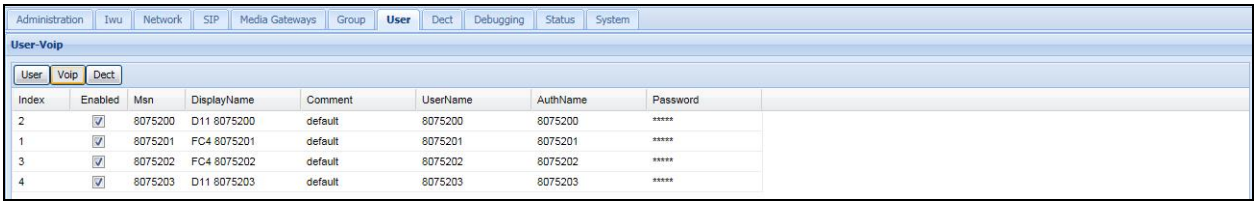
The language used for display messages of the handset can is selected here. This configuration example uses language "Deutsch". The supported languages are shown below.



Groups

Choose a Group (and with that a Gateway) from the dropdown box to which the user is associated to. This configuration example uses the default Group name "default".

Switch to configuration page **User→ Voip**.



Change the contents of the following fields:

UserName (necessary)

Configure the Name or Number for the registration of the User at the PBX. This configuration example uses the UserName 8075200, 8075201, 8075202 and 8075203.

AuthName (optional)

Configure the AuthName which is used for the authentication at the PBX (together with "Password"). This configuration example uses the AuthName 8075200, 8075201, 8075202 and 8075203.

Password

Optional, but necessary if an "AuthName" is configured. The password which is used for the authentication at the PBX (together with "AuthName"). This configuration example uses the Passwords "0000" but shown as "****".

Note: *The entries in the password field are visible only at time of adding or overwriting a password. After applying the changes, the password fields are masked out and not visible anymore.*

Apply the changes by clicking the **Apply** button (not shown) at the bottom section.

Confirm the message box by clicking on **OK**.
To append further users to the configuration, repeat the steps above.

6.6. Configure DECT-FB4 IP Base Stations to the System

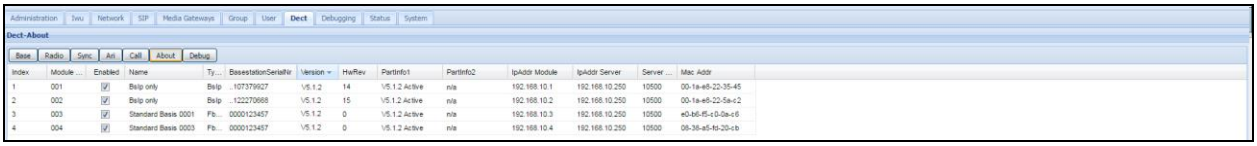
To attach at least two DECT-FB4 IP Access Points to a PoE port of the network switch of the DECT network. If you use a standard port of the network switch without PoE, use a separate power supply.
Inside this configuration example the first DECT-FB4 IP access point is configured as the synchronization master for over-air synchronization. The second DECT-FB4 IP access point and all further access points are configured as synchronization slave.
Wait about 2 minutes until the LED states at the DECT-FB4 IP base stations change to permanently red.

DECT About

At the WBM of the DECT Controller switch go to the configuration page Dect-About (not shown).

- To scan the newly attached second DECT-FB4 IP click on the button [Scan].

The newly attached DECT FB4 IP should be found automatically and a record will be appended for it in the table of DECT devices.



DECT Base

At the WBM of the DECT Controller switch to configuration page "Dect-Base".
The DECT-FB4 IP base station has to be configured for usage within the IP-DECT System. Select the newly created entry for DECT-FB4 IP base station and change the contents of the following fields:

Enabled (necessary)

Set to Enabled for usage within the IP-DECT System.

Name (necessary)

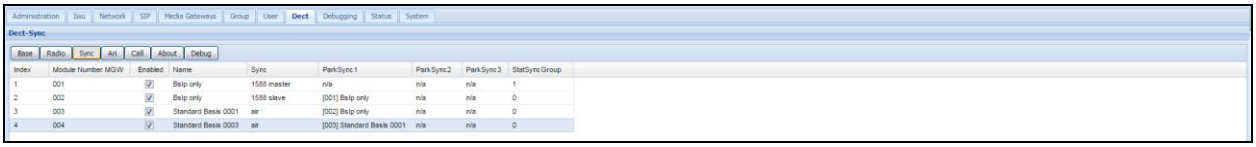
Configure a descriptive name for the DECT base station. Change the preconfigured name of the DECT base station (e.g. to the name of the physical location it is designated for). This name is only used for the internal configuration of the base station.

IpAddrModule (necessary)

Configure an IP address for this DECT RBS inside the DECT network. Hint: The IP-DECT System-System automatically suggests a valid IP address.

DECT Sync

At the WBM of the DECT Controller switch go to the configuration page **Dect-Sync**.



Select the newly created entry for DECT Controller and change the contents of the following fields:

Sync (necessary)

Set **air** under **Sync** to synchronize the actual access point to another access point via air.

ParkSync1 (necessary)

Select from the dropdown to which access point the selected access point should be synchronized to. This configuration example uses Module "[001] Bsip Only" as the sync master.

DECT ARI

At the WBM of the DECT Controller switch to the configuration page **Dect-Ari**.

Select the newly created entry for base station and change the contents of the following fields:

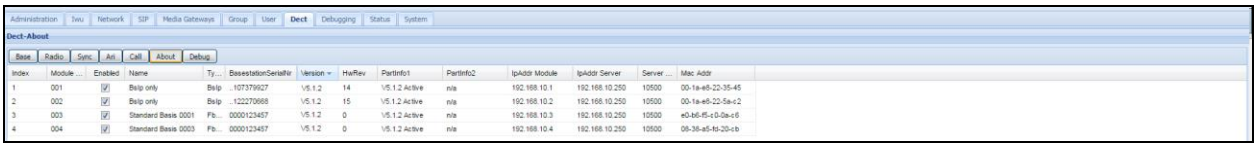
Segment Relative Index

Using this dropdown box, the DECT module has to be assigned a relative Index related to the selected location segment inside the MGW. The combination of **Segment** and **Segment Relative Index** will be calculated by the WBM to the resulting RPN.
Note: The IP-DECT System-System automatically suggests a valid RPN Segment Relative Index.

***Note**: When using several base stations they have to be configured with a unique "Segment Relative Index" different from "0". Using the same Segment Relative Index as the DECT module number (Index) is an option.*

DECT About

At the WBM of the DECT Controller switch go to the configuration page **Dect-About.**

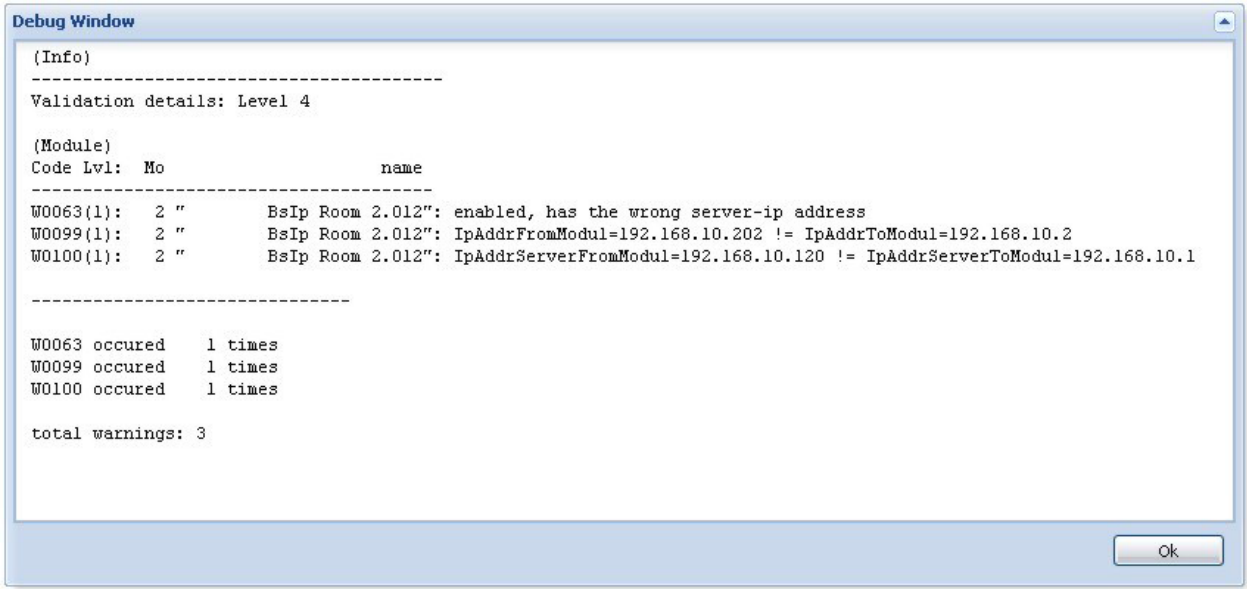


The fields **IpAddr Module** and **IpAddr Server** display the current (default) values for the selected access point.

To apply all the changes to all access points, the access points have to be synchronized. During the synchronization process the base station will receive its configuration values from the DECT Controller.
Apply the changes by clicking the **Apply** button (not shown) in the bottom section.

Confirm the message box by clicking on **OK**.

A debug window will open.



Close the Debug window by clicking on **OK**.

Start the synchronization process by clicking the **Sync** button (not shown) in the bottom section. A message box will appear.

Confirm the message box by clicking on **OK**.
The following process will transfer the new settings to all access points. Therefore, the access points will be rebooted automatically by the system.
Wait about **2 minutes** until the base station is started completely (LED states should be green/red).

To verify the configured values of the previous steps, click the button **SCAN**(not shown).

At the WBM of the DECT Controller go to the configuration page **Dect-About**(not shown).
Verify the values **IpAddr Module** and **IpAddr Server** contain the correct values which have been configured before (IpAddrModule → IpAddr Module, Server Ip → IpAddr Server).

6.7. Start System Services and Register Handsets

Start System Services

Go to the configuration page **System**.
To start the functionality of the DECT Controller, you first have to start the system services.
Start the services by clicking the **System Start** button (not shown) at the bottom section. Starting the services requires some time.
Check if the system services are running by clicking at the [Refresh] button (not shown) several times.

If the system services are started correctly (all states displayed as **Running**, the LED state at the DECT access point should change from flashing yellow to flashing green.
If a time server is configured correctly and can be contacted, the field **Up since** should display actual local time values, otherwise time will start at **01.01.1970 00:00**.

Register Handsets

Note: *Alternatively it is possible to register several users at once using the Bulk Registration Mode. Since this method is out of scope of a quick start, the manual method is used here.*

User-DECT

Go to the configuration page **User-Dect**.

- Prepare one handset for the registration process.
- Attention: Do not confirm the following procedure at the Handset right now! Start the **Registration procedure** via the **menu on the Handset**.
  If the handset requires a PARK, leave the PARK field empty and confirm with **OK**.
  – If the handset requires an Access Code, enter the DECT Controller system PIN which has been pre-configured to **0000** at configuration page **DECT** as Access Code.
  Attention: Do not confirm this entry yet!
- Select the corresponding user in the WBM to which the handset has to be assigned to.

Activate the Registration procedure at the WBM by clicking at [Register] at the bottom section of page **User-Dect**(not shown).

Now confirm the already entered PIN at the Handset (normally with soft button **OK**). The WBM displays the successful Registration of the Handset.

The IPUI of the registered handset is displayed in hexadecimal notation in the user entry.

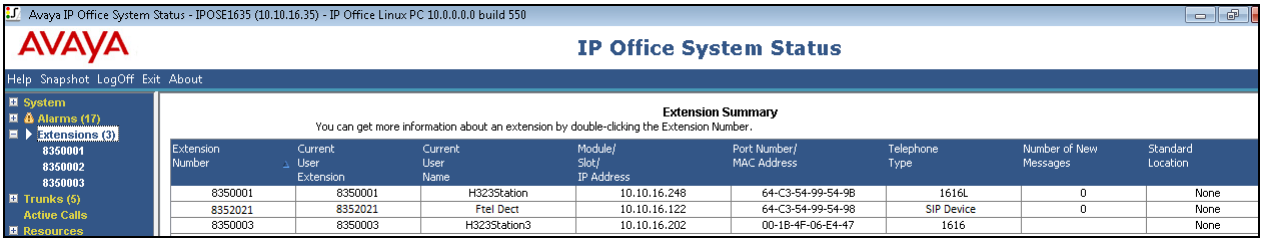
After registering several users, telephony functionality should be available. You should be able to establish calls between the handsets.

7. Verification Steps

This section provides the tests that can be performed to verify correct configuration of the IP Office and Funktel solution.

7.1. IP Office Station Registration Verification

Open the IP Office System Status and select Extensions from the left hand menu. This shows the registered stations on the IP Office.



7.2. Funktel f.airnet wireless DECT Handset Registration Verification

Verify that the f.airnet DECT handset can make a call to another IP Office extension and that the correct Extension number is shown on the display

8. Conclusion

A full and comprehensive set of feature and functional test cases were preformed during Compliance testing. Funktel f.airnet Wireless IP-DECT SIP Solution is considered compliant with Avaya IP Office 10. All test cases have passed and met the objectives outlined in **Section 2.2**

9. Additional References

These documents form part of the Avaya official technical reference documentation suite. Further information may be had from *http://support.avaya.com* or from your Avaya representative.

Avaya IP Office Manager 10.0, Document 15-601011, Issue 1, August 2016

Product Documentation for Funktel Products can be obtained from Funktel.

[1] *DECT IP Controller Administration Manual,* Document ID 5010790011
[2] *Bedienungsanltg. FC4/FC4Ex(HS),* Document ID 5000807201
[3] *Bedienungsanleitung D11/FC11,* Document ID 5000807226

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.