Avaya Solution & Interoperability Test Lab

Application Notes for New Voice Technologies Mobicall 8.2 with Avaya IP Office Server Edition 10 and 500v2 Expansion - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate New Voice Technologies Mobicall with Avaya IP Office Server Edition 10 and 500v2 Expansion. Mobicall is an Alarm generation and distribution solution that connects to IP Office as a SIP line.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the 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 required to successfully integrate New Voice Technologies Mobicall with Avaya IP Office Server Edition 10 and 500v2 Expansion. Mobicall is an Alarm generation and distribution solution that connects to IP Office as a SIP Line. System alarms are recorded on the Mobicall server by calling Mobicall and recording an alarm which is automatically or manually distributed to IP Office endpoints by the Mobicall server.

2. General Test Approach and Test Results

The general test approach was to configure the Mobicall Server to communicate with the IP Office via a SIP Trunk. Stations present on the IP Office were configured on the Mobicall server and a number was configured to dial Mobicall and create and initiate alarms.

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 interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on setting and distributing alarms in different call scenarios with good quality audio. The tests included:

- Mobicall SIP trunk is connected and in Service.
- Mobicall can route alarms to SIP, Digital and H.323 endpoints.
- Mobicall can use the Dial Paging feature in IP Office to alert extensions and groups to alarms created in Mobicall.
- Alarms can be set and distributed from IP Office to/from Mobicall.
- Failover/Service – Tests the behaviour of Mobicall Server during certain failed conditions.

2.2. Test Results

All test cases were passed.

2.3. Support

NewVoice AG
Militärstrasse 90, 8004 Zürich

Telephone	+41 58 750 11 11
Fax	+41 58 750 11 12
E-Mail	support@newvoice.ch
Internet	mobilisierung.com

3. Reference Configuration

The configuration shown in Figure 1 was used during the compliance test of New Voice Technologies Mobicall with IP Office. Mobicall utilizes a SIP trunk to communicate with IP Office handsets.

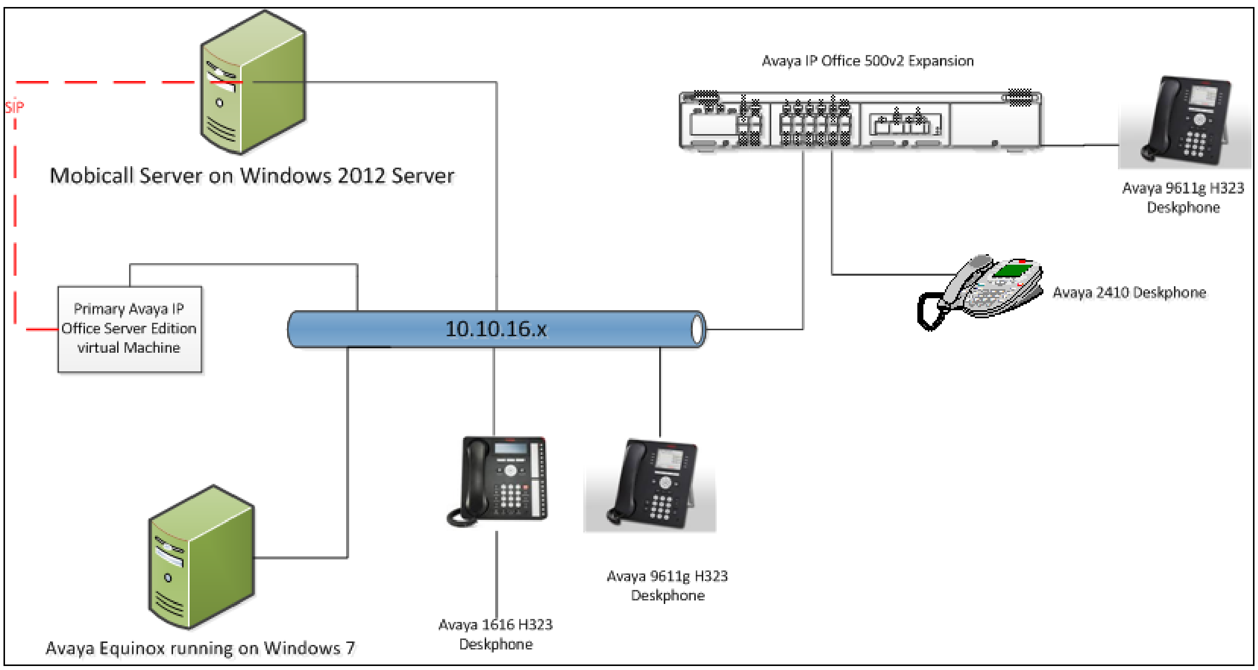


Figure 1: Connection of Mobicall with Avaya IP Office Server Edition 10 and 500v2 Expansion

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office Server Edition	10.0.0.0.3.0 Build 5
Avaya IP Office 500v2	10.0.0.0.3.0 Build 5
Avaya 1616 IP Deskphone H.323	1.390A
Avaya 9611g IP Deskphones H.323	6.6401
Avaya 2420 Series Digital Deskphones	N/A
Avaya Equinox for Windows SIP	3.0.2.11
Mobicall	8.2

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. Configure Avaya IP Office

This section describes the steps required to allow IP Office to communicate with Mobicall. It is assumed that IP Office is installed and configured before implementing the configuration step below. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**.

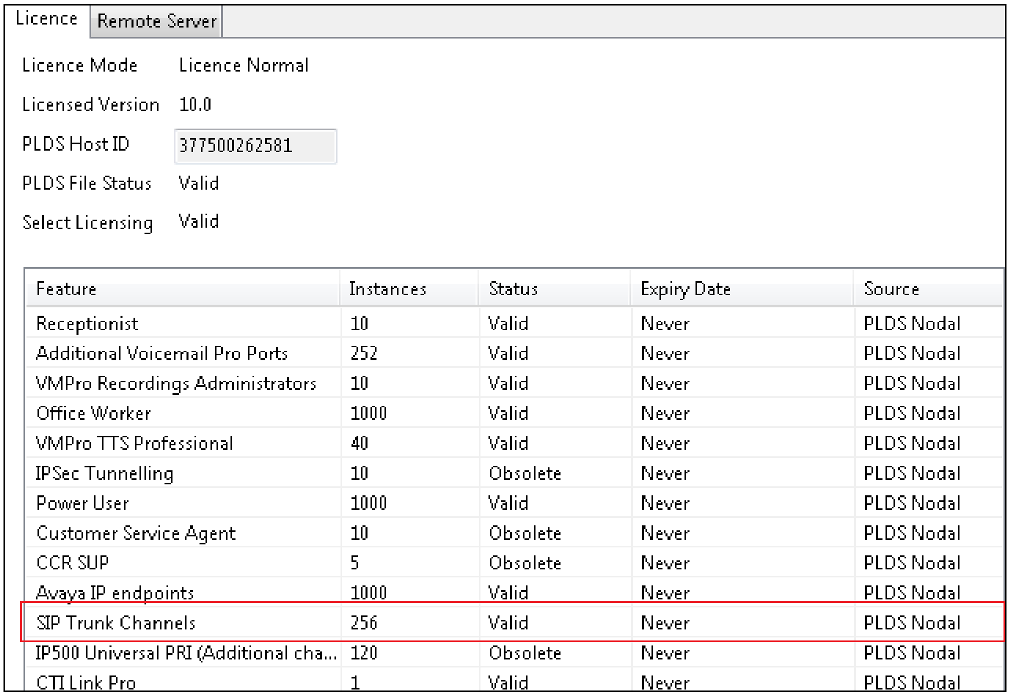
The configuration illustrated in this section was performed using IP Office Manager

Configuration steps include:

- Check SIP Trunk Licensing
- Administer System Lan settings
- Administer Short Codes for routing and feature
- Administer Short Code for Paging
- Administer Incoming Call route for activating alarms
- Administer SIP Line

5.1. Check IP Office Licenses

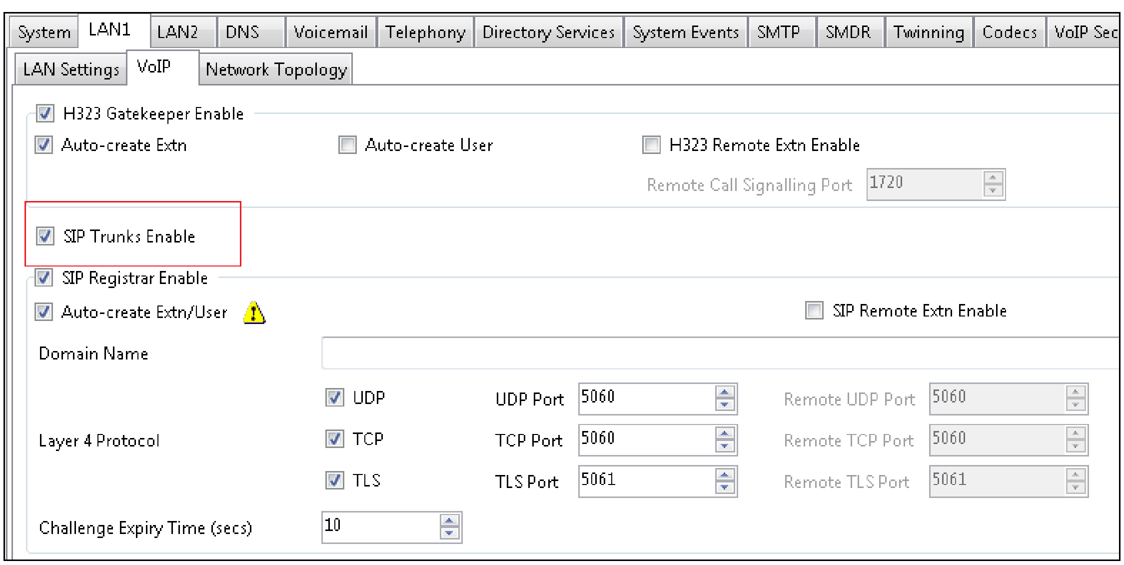
In IP Office Manger under **Configuration** select **Licenses** and check the number of **SIP Trunk Channels** are enough for the Mobicall SIP trunk requirements.



Feature	Instances	Status	Expiry Date	Source
Receptionist	10	Valid	Never	PLDS Nodal
Additional Voicemail Pro Ports	252	Valid	Never	PLDS Nodal
VMPro Recordings Administrators	10	Valid	Never	PLDS Nodal
Office Worker	1000	Valid	Never	PLDS Nodal
VMPro TTS Professional	40	Valid	Never	PLDS Nodal
IPSec Tunnelling	10	Obsolete	Never	PLDS Nodal
Power User	1000	Valid	Never	PLDS Nodal
Customer Service Agent	10	Obsolete	Never	PLDS Nodal
CCR SUP	5	Obsolete	Never	PLDS Nodal
Avaya IP endpoints	1000	Valid	Never	PLDS Nodal
SIP Trunk Channels	256	Valid	Never	PLDS Nodal
IP500 Universal PRI (Additional cha...	120	Obsolete	Never	PLDS Nodal
CTI Link Pro	1	Valid	Never	PLDS Nodal

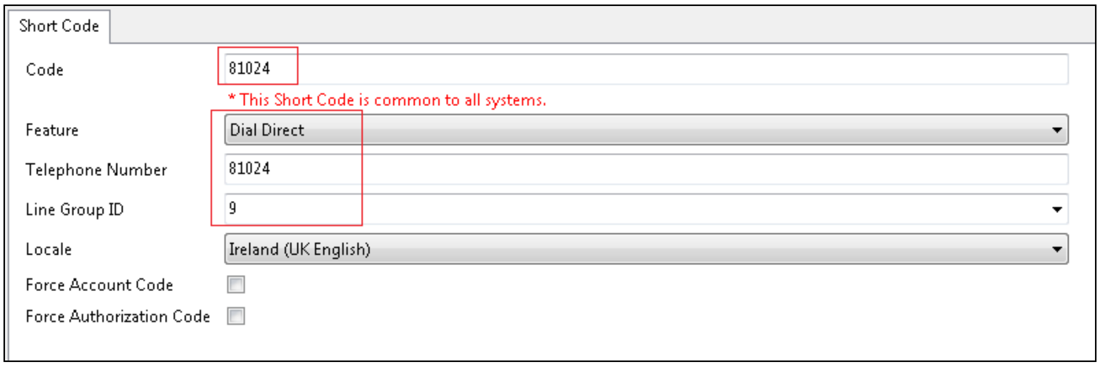
5.2. Check System LAN Settings

Select the **Server edition → System** (not shown) and Go to the **LAN1** tab. Check that **SIP Trunks Enable** is selected on the **VoIP** form.



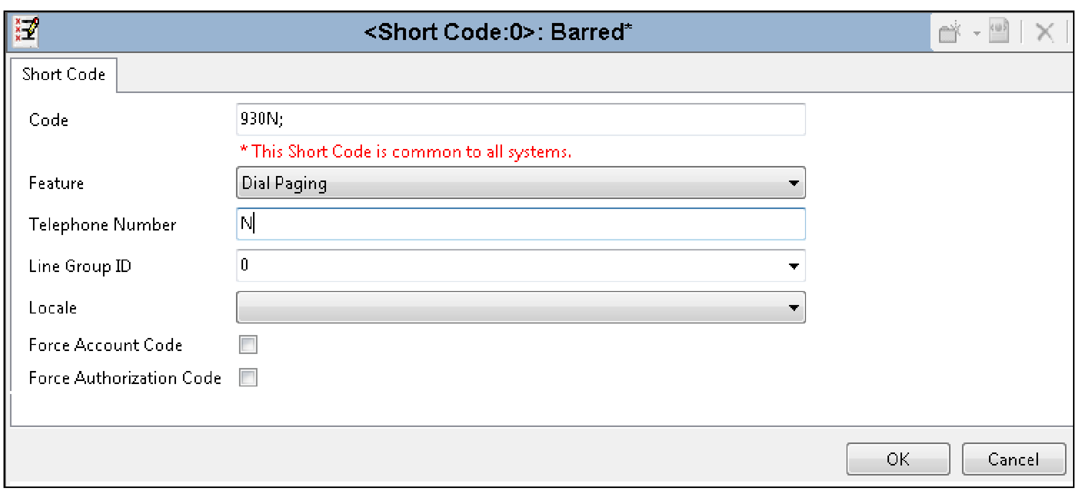
5.3. Add a Short code for routing calls to Mobicall

A short code is required to allow calls to be made to Mobicall and record and distribute alarms. From **Solution→Short Code** (not shown) right click and select **New** (not shown). Enter the number you wish to dial to access Mobicall as the **Code**. Select **Dial Direct** from the **Feature** drop down, enter the number again as the **Telephone Number** and select the **SIP Line Group ID** used to dial Mobicall.



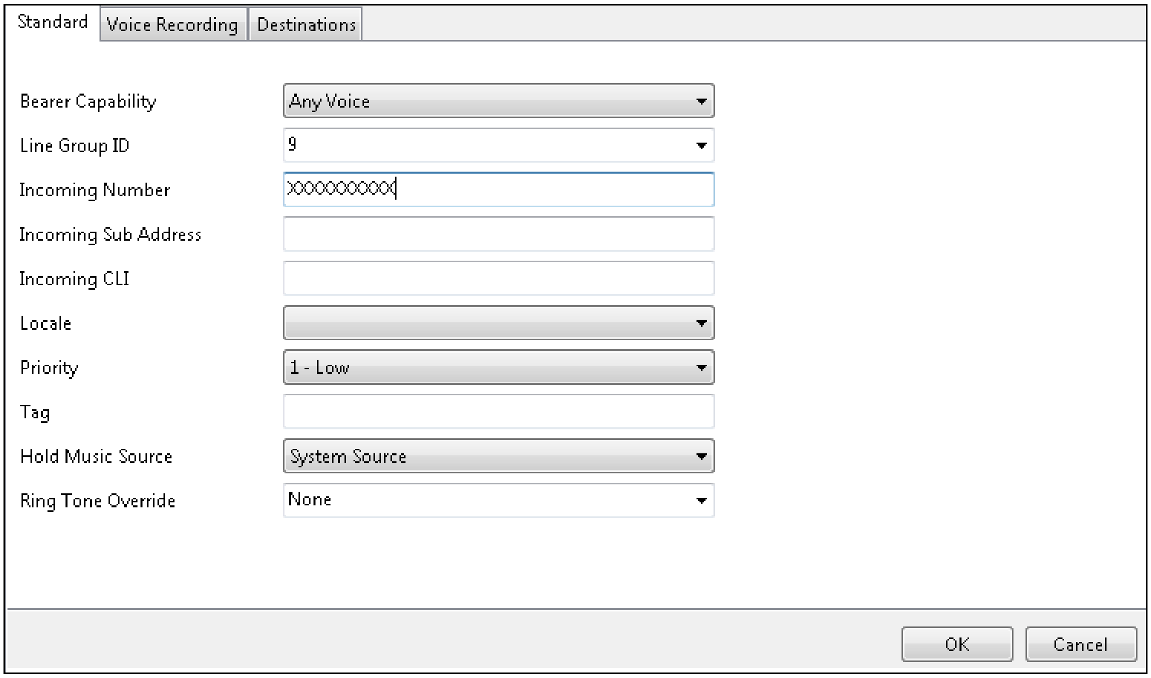
5.4. Add a Short code for Paging

Alarms from Mobicall can be distributed to Extensions or groups dialing direct or by paging the IP Office users. A Dial Paging short code needs to be administered to access this feature. From **Solution→Short Code** (not shown) right click and select **New** (not shown). Enter the number you wish to dial to activate the Dial Paging feature as the **Code**. Select **Dial Paging** from the **Feature** drop down, enter **N** as the **Telephone Number** and select the **Line Group ID** 0 so that it can be used globally.

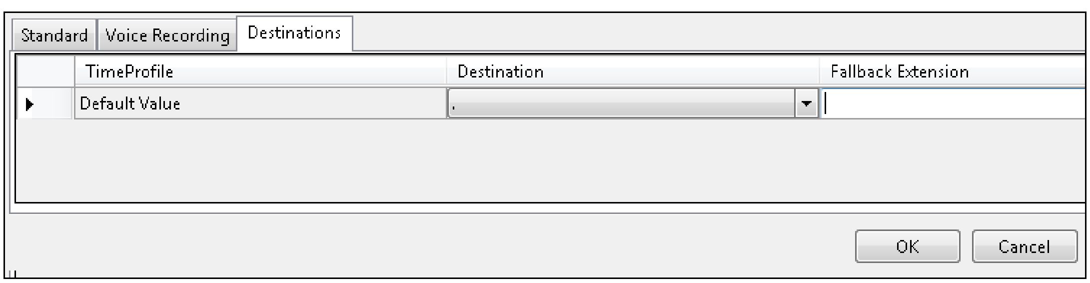


5.5. Add an Incoming Call Route for activating alarms

An Incoming Call Route must be added to allow any calls from Mobicall to be routes correctly. From the **Solution → Incoming Call Route** right click and select **New** (not shown). Select the **Line Group ID** used for the Mobicall SIP Line. Enter the **Incoming Number** as the number of **X**'s to cover the length of any number dialed form Mobicall (10 were used during testing to cover the Paging Short Code and the Extension Lengths).

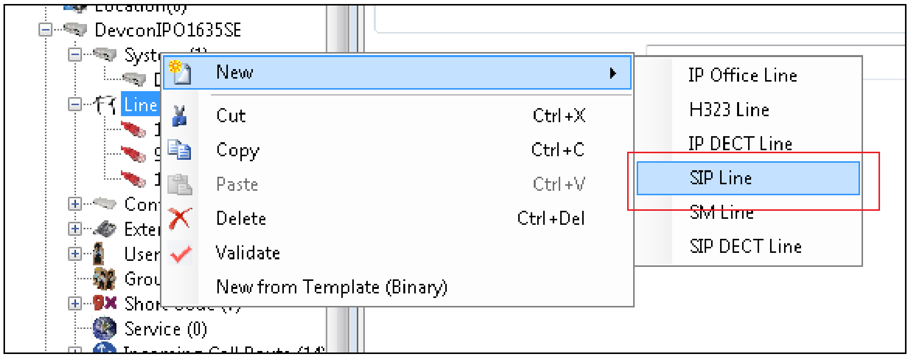


Select the **Destinations** tab and enter a "**.**" under **Destination**. This this means that calls will be routed to the number dialed.

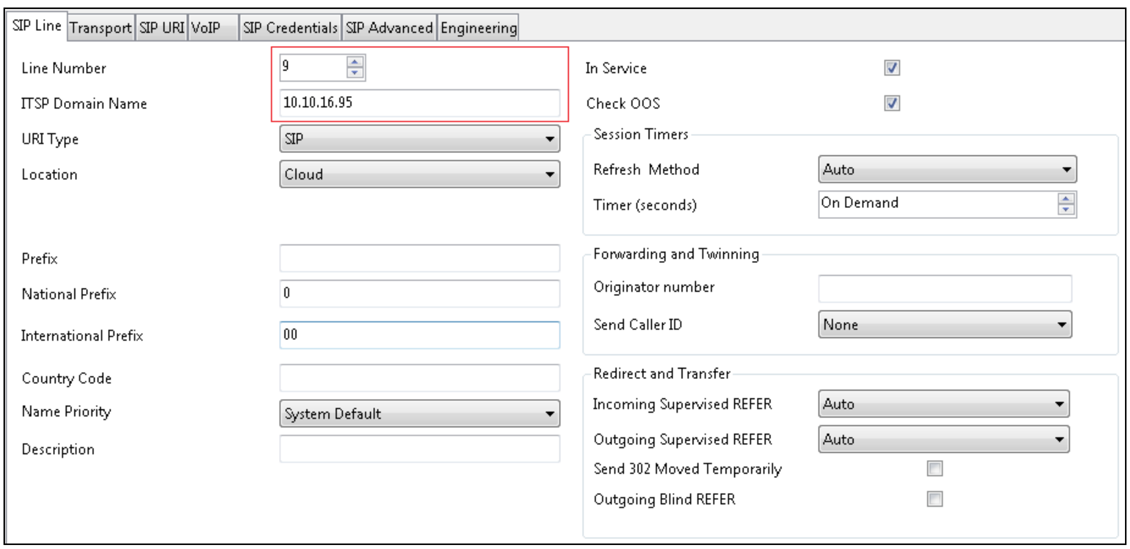


5.6. Administer a SIP Line

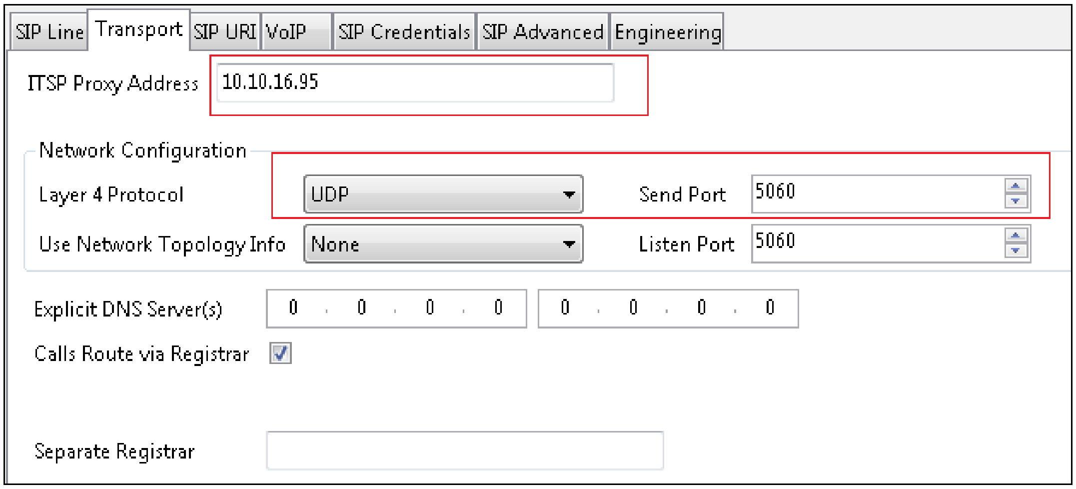
A SIP Line is required for call routing between the IP Office and Mobicall. From the **Server Edition→Line** right cick and select **New→SIP Line**.



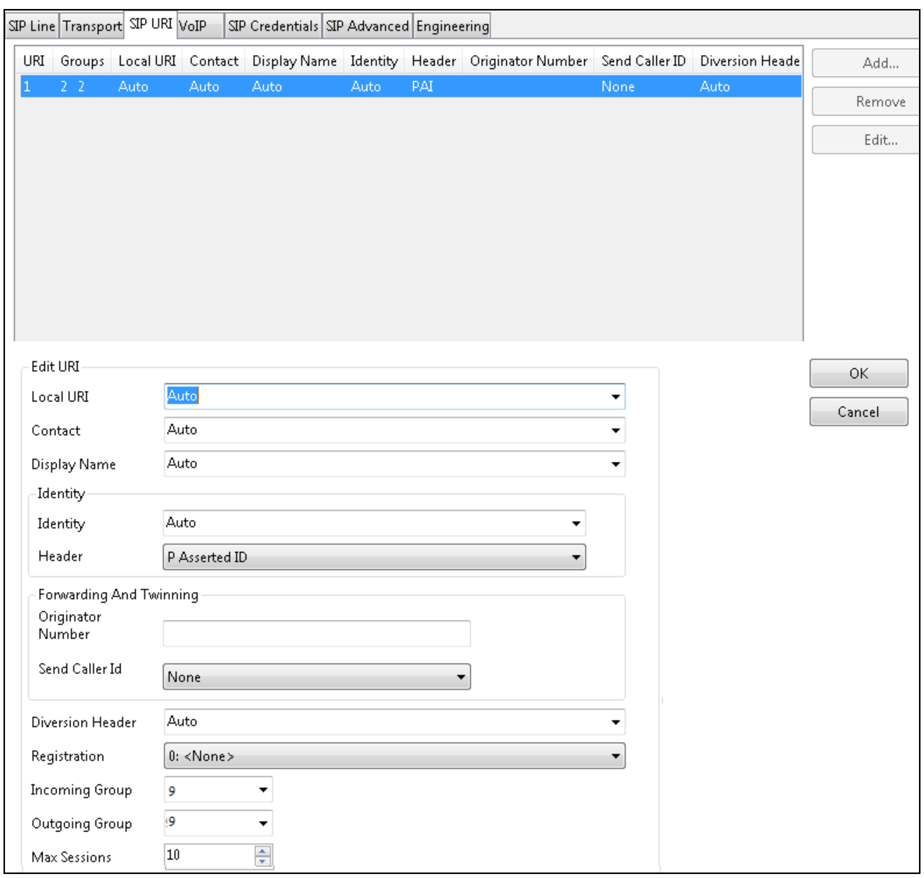
On the **SIP Line** tab enter an unused **Line Number** and an **ITSP Domain Name**. The Mobicall Server IP Address is used here.



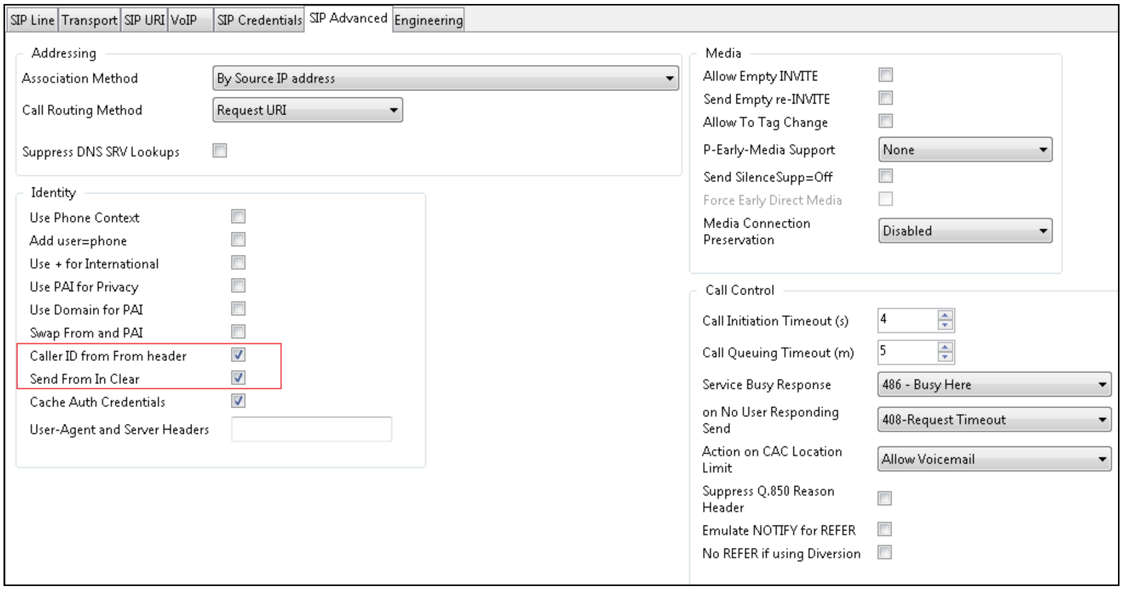
On the **Transport** tab enter the Mobicall Server IP Address as the **ITSP Proxy Address** and set the **Layer 4 Protocol** and **Send Port**.



On the **SIP URI** tab click on **Add** and select **Auto** for **Local URI, Contact**, **Display Name** and **Diversion Header**. Set the **Incoming** and **Outgoing Group** to the SIP Line number. Click on **OK** to save changes.



On the **SIP Advanced** tab select **Caller ID from From header** and **Send From In Clear**.



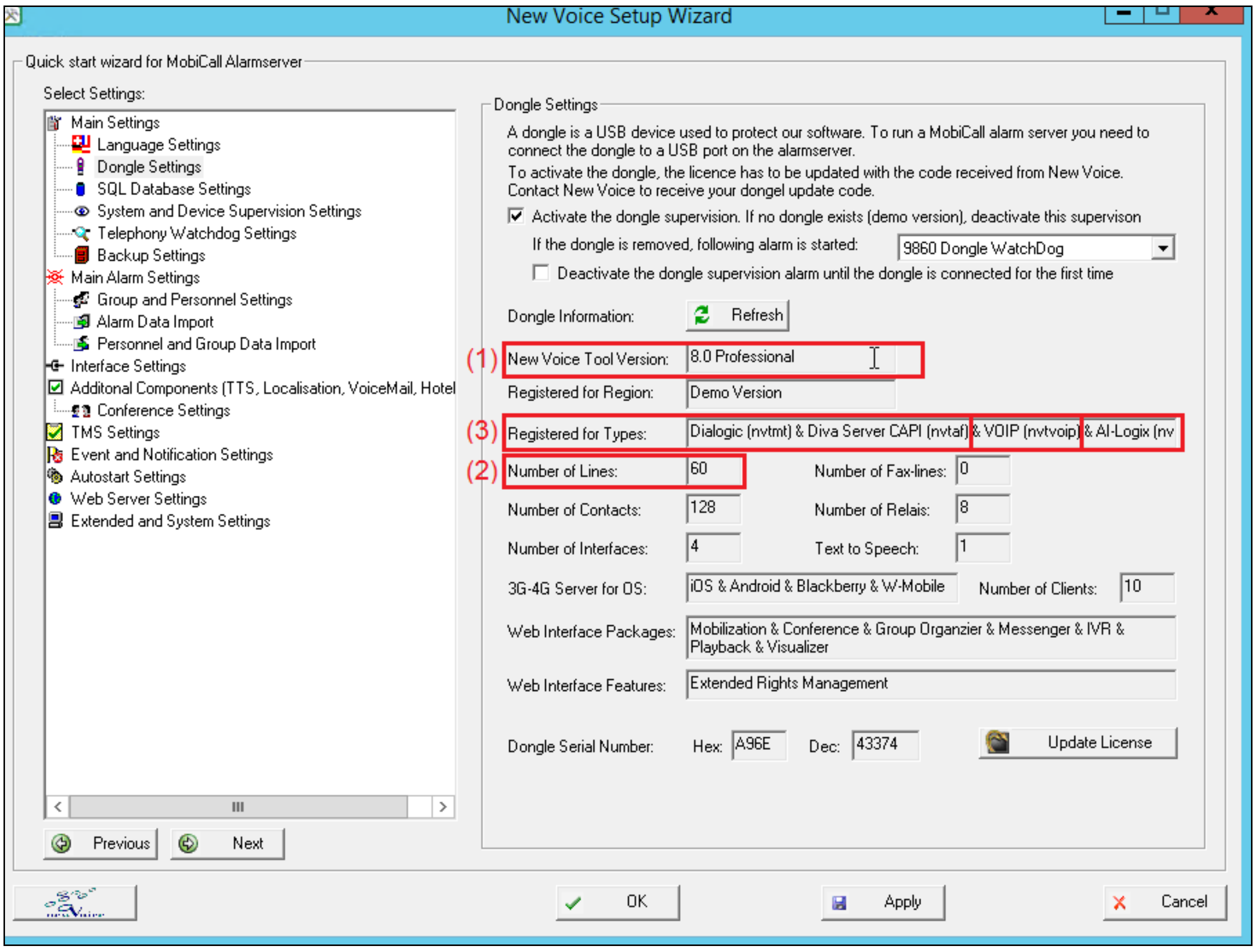
After all IP Office configuration has been completed, the Configuration needs to be saved and the IP Office must be rebooted.

6. Configure New Voice Technology Mobicall

Setting up the MobiCall installation is not described here. Please take a look into the link for documents provided by NewVoice. (see **Section 9**)

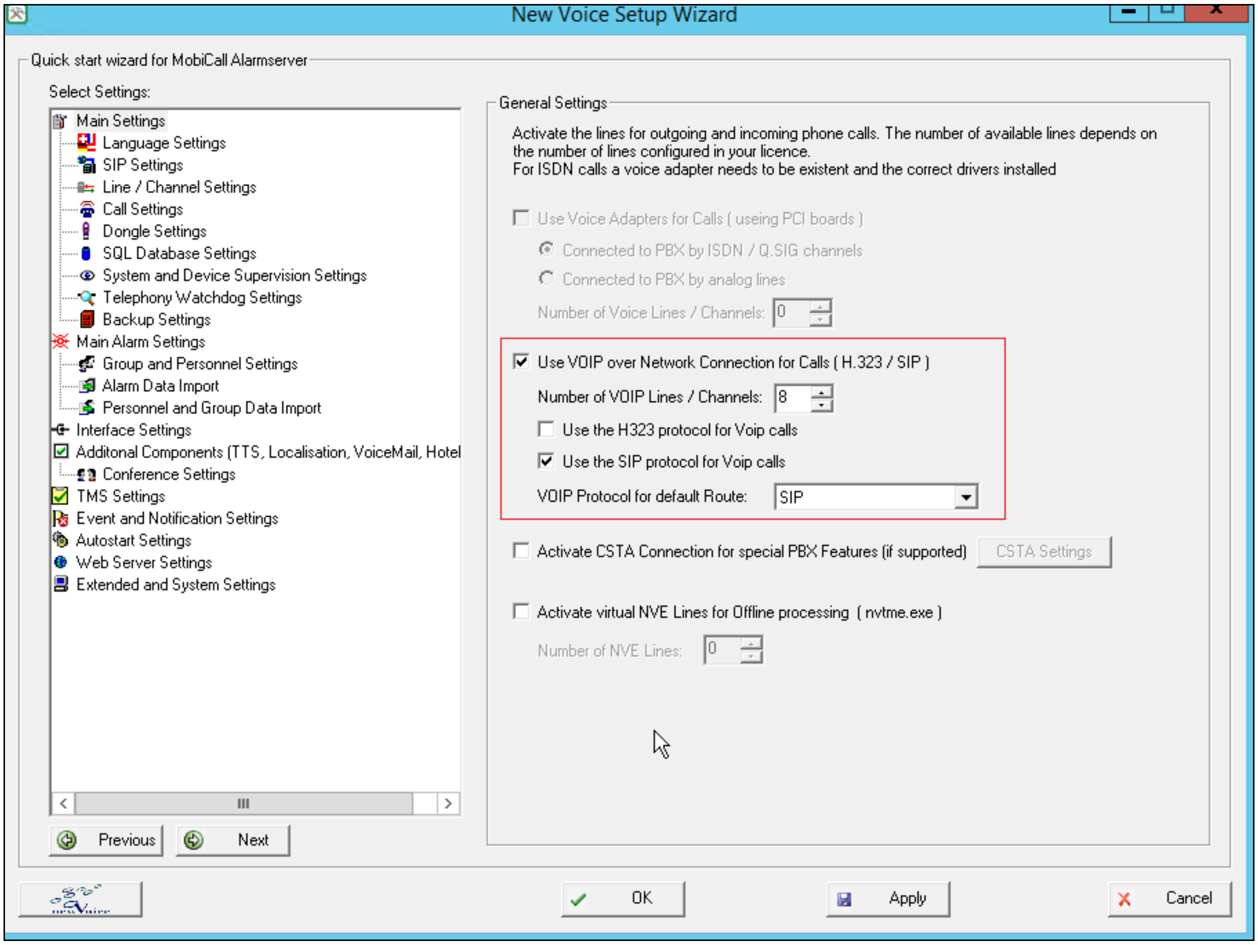
6.1. License Settings

Open New Voice Setup Wizard – Select **Main Settings → Dongle Settings** from the left hand menu



Check the licenses on your USB Dongle:
Required is at least (1) **NewVoice Tool Version - 8.x** with (2) **2 lines** and (3) **invtvoip** as registered type.

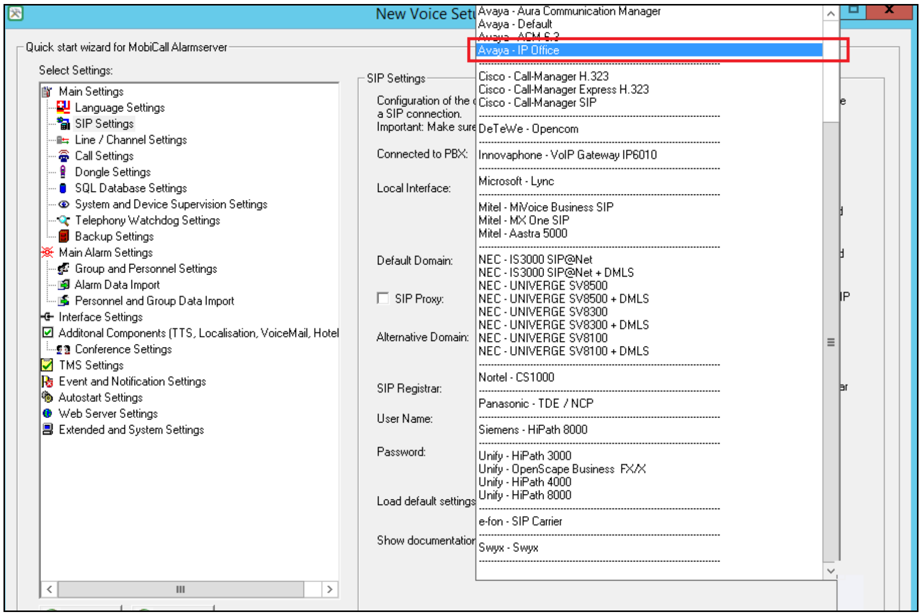
New Voice Setup Wizard – Main Settings



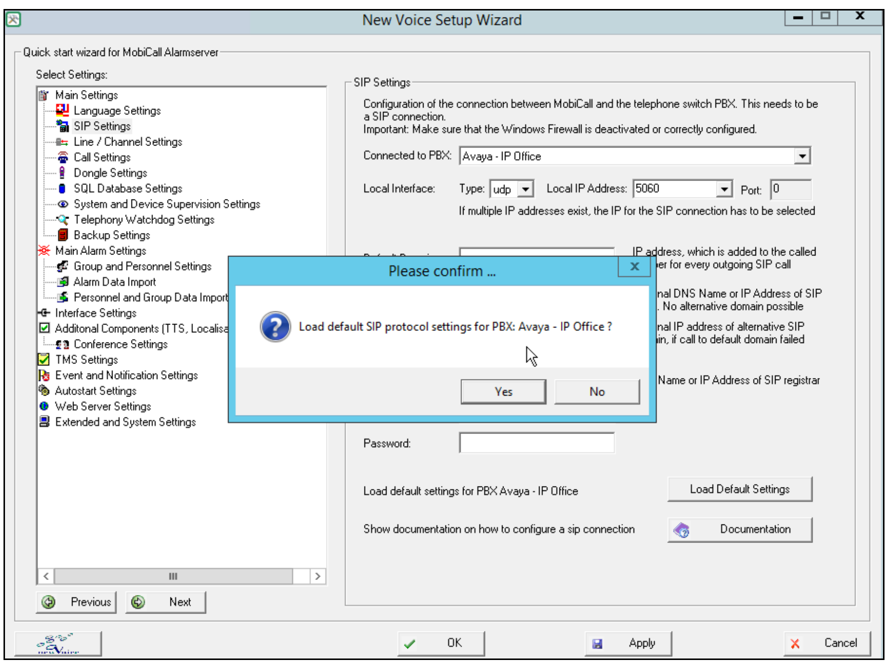
Activate the SIP Lines licensed by setting Number of VOIP Lines / Channels to no more than the licensed number.

6.2. SIP Settings

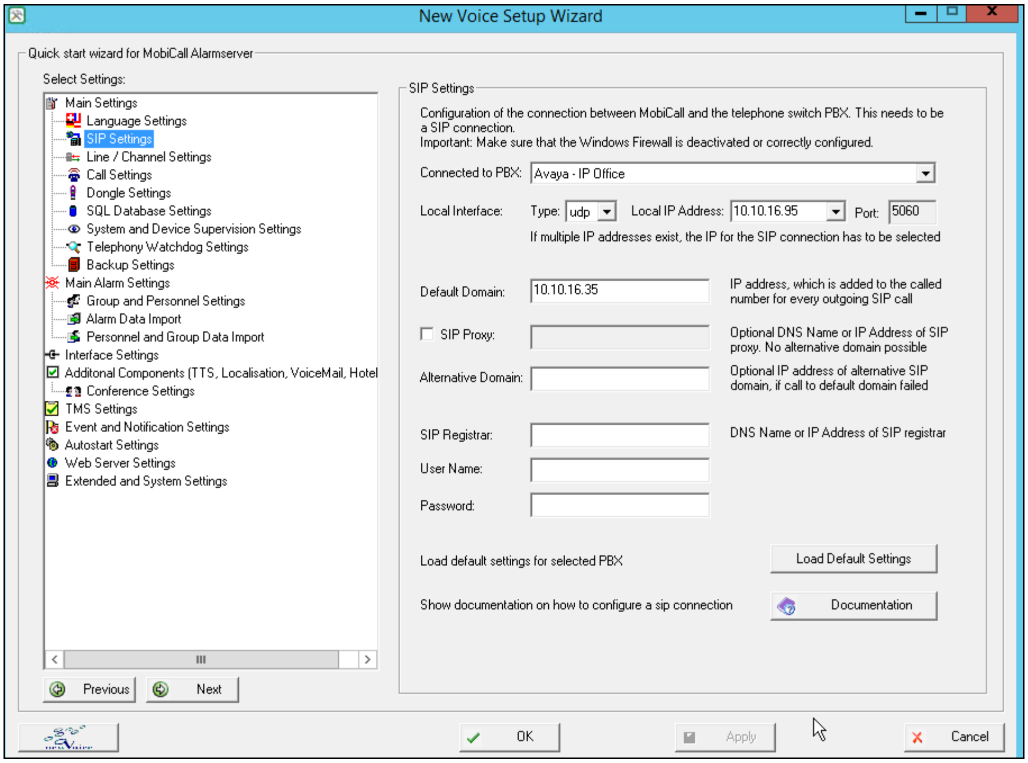
Select Main Setting → SIP Settings from the left hand menu



Load the necessary PBX profile



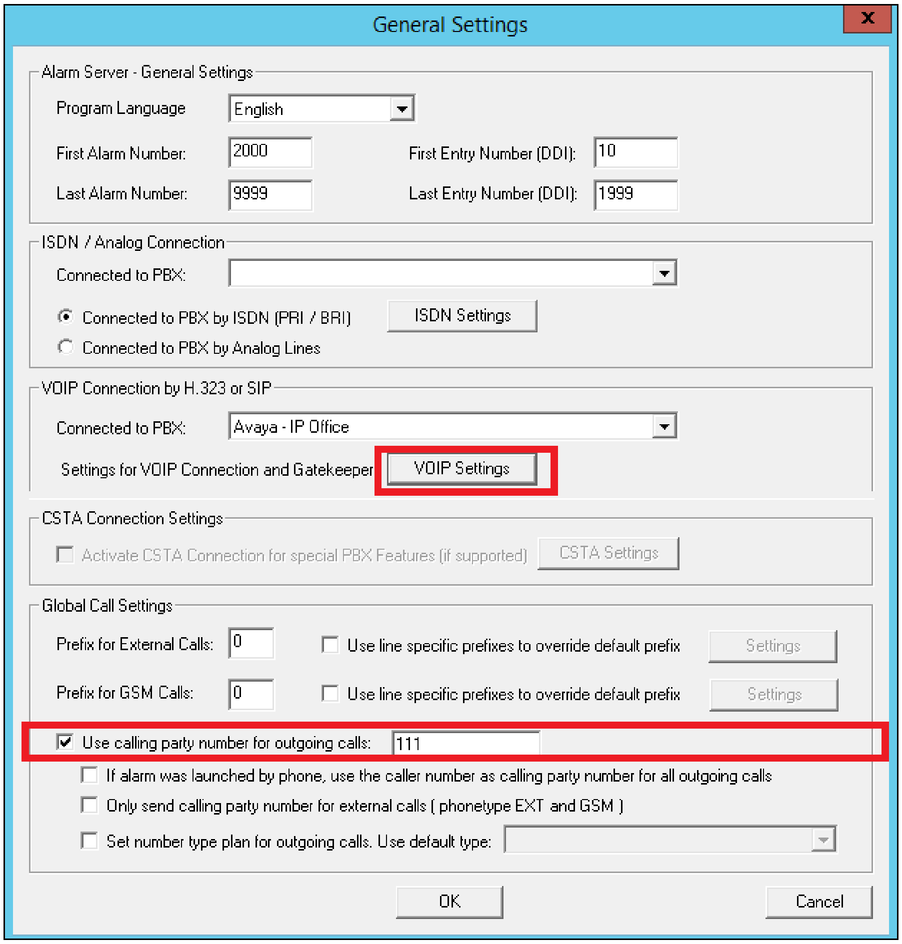
NewVoice Setup Wizard – SIP Settings



Fill in the required settings

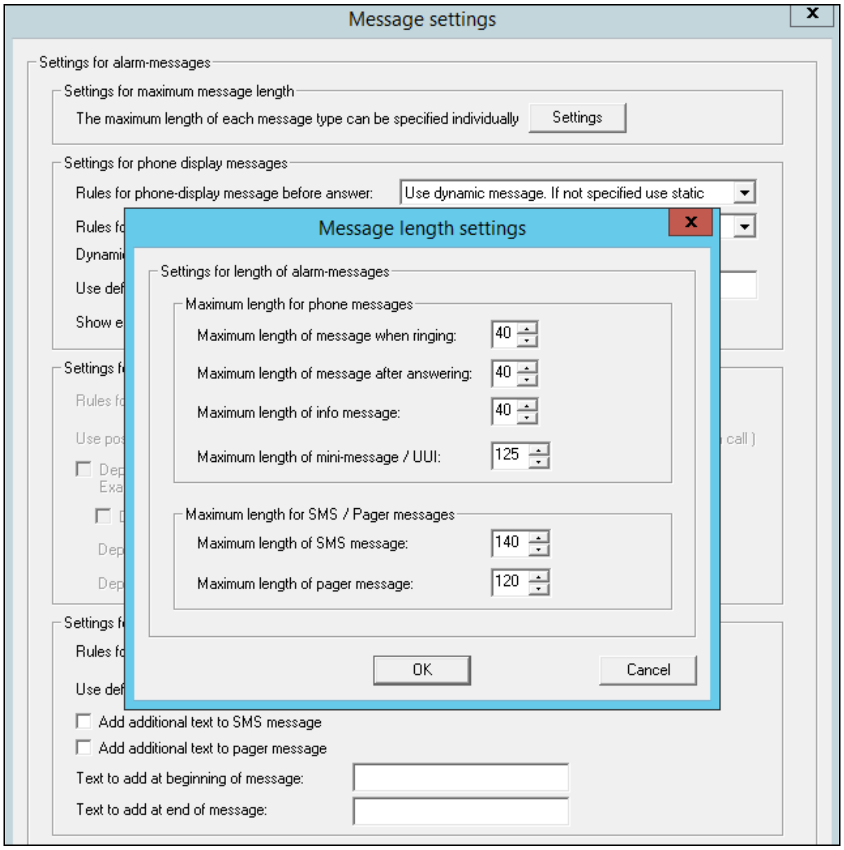
Local Interface Type:	UDP
Local Interface IP Address:	IP Address of MobiCall
Local Interface Port:	5060
Default Domain:	IP Address of your Avaya IP Office

NewVoice Alarm Central – Settings – General Settings



Set the **Calling party number** for outgoing calls

NewVoice Alarm Central – Settings – Message Settings – Settings



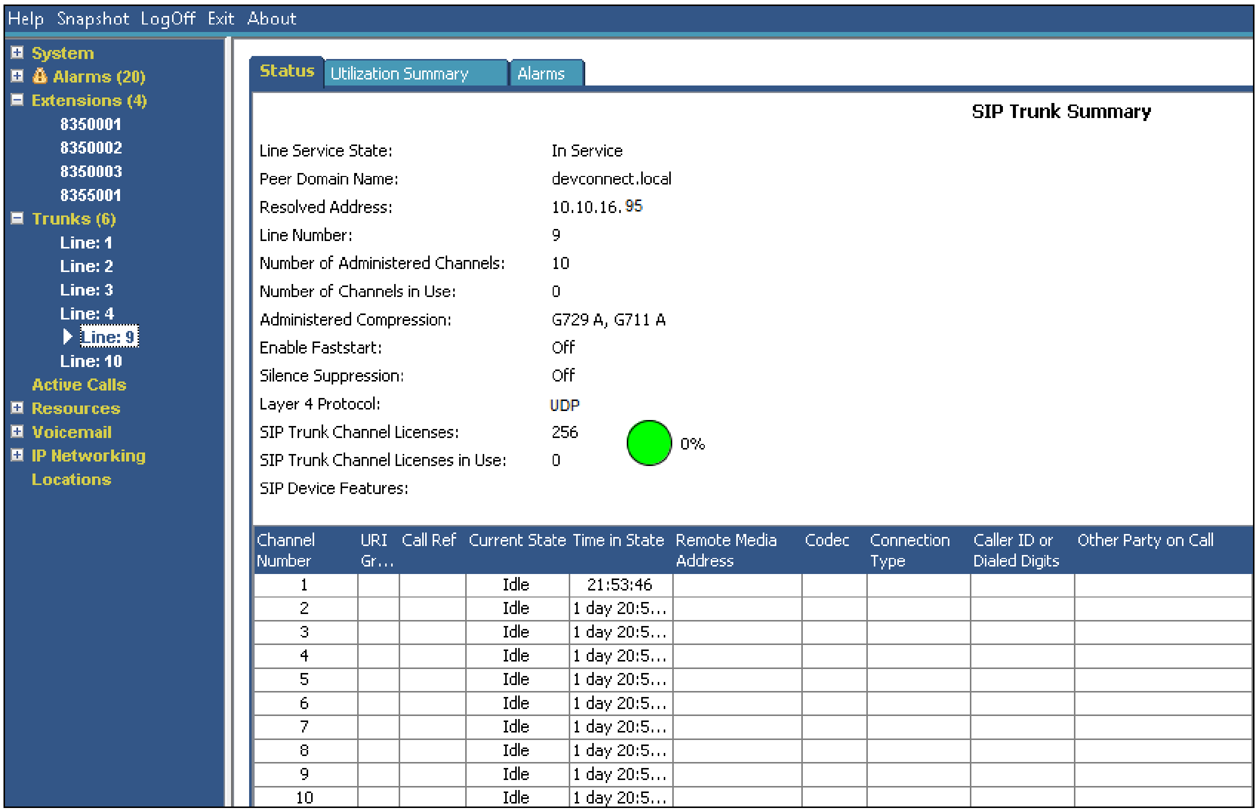
Change the standard settings to have the maximum length supported by your phone display. Some phone types do not support that much signs, so they will cut the text at the end.

7. Verification Steps

This section describes the checks that can be carried out to verify the connection between Mobicall and IP Office

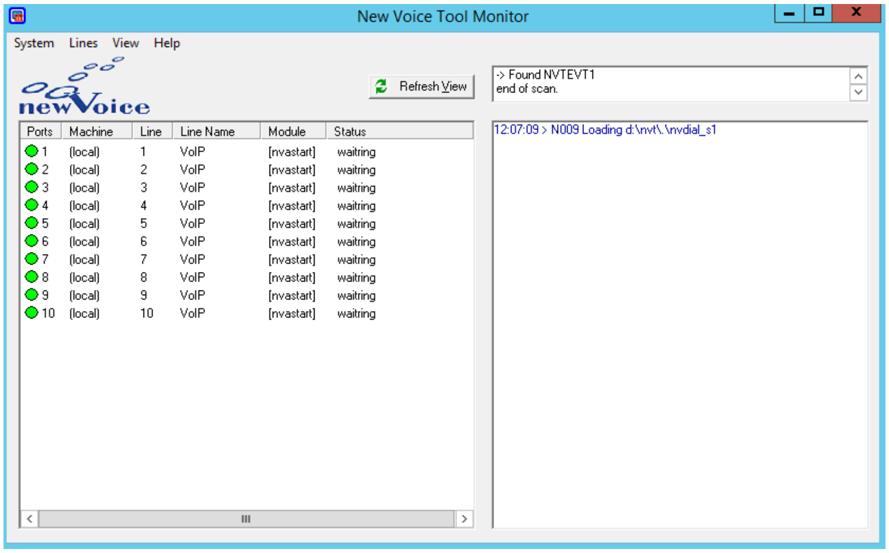
7.1. IP Office Verification

Using **IP Office System Status** select **Trunks→Line:x** where x is the line added above. Check that the Trunk shows **In Service** and that the trunks are Idle or Active.



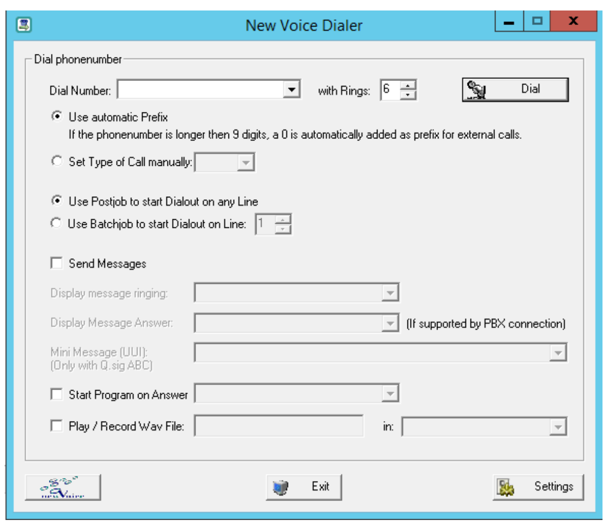
7.2. MobiCall Line Monitor and Dial utility

New Voice Tool Monitor can be found as shortcut on the desktop.



A successful communication between MobiCall and the IP Office can be verified via the tools **New Voice Tool Monitor** and the **New Voice Dial Utility.**

The **New Voice - Alarm Central** can be used to make test calls. A Shortcut to this can be found on the desktop. From the **Extras** menu select **Dial Utility** (not shown).



Enter a **Dial Number** for an extension or group on the IP Office and press **Dial** to start an outgoing call. The Paging Short Code added in **Section 5.4** must be used as a prefix for the number to use this feature.

8. Conclusion

These Application Notes describe the configuration steps required for New Voice Technologies Mobicall to interoperate with Avaya IP Office Server Edition with 500v2 Expansion. All feature functionality and serviceability test cases were completed successfully as outlined in **Section 2.2**.

9. Additional References

This section references the Avaya and New Voice Technology product documentation that are relevant to these Application Notes.

Product documentation for Avaya products may be found at *http://support.avaya.com*.

[1] *Administering Avaya IP OfficePlatform with Manager, Id: 101005673*

[2] *Using IP Office Platform System Status Id: 101005061*

Product documentation for New Voice Technologies Mobicall can be obtained by visiting the following website www.mobilisierung.com

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.