Avaya Solution & Interoperability Test Lab

Application Notes for Endurance 10CA, 20CA and 30CA Analogue Telephones from Interquartz with Avaya IP Office 500 v2 R9.0 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Endurance 10CA, 20CA and 30CA analogue telephones to interoperate with Avaya IP Office 500 v2 R9.0.

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 outline the steps necessary to configure Endurance 10CA, 20CA and 30CA analogue telephones from Interquartz on Avaya IP Office. Interquartz supply telephones in the Corporate, Financial, Health, Government, Educational, Industrial, Hotel & Hospitality and SME/SoHo market sectors. Endurance telephones are designed ideally for the hospitality industry.

2. General Test Approach and Test Results

The test approach was to configure an analogue Extension and User on IP Office and to connect each Endurance telephone to the appropriate analogue port. Calls are made to and from each Endurance telephone using an Avaya SIP, H.323 and Digital deskphone in order to ensure that each party can successfully complete a telephone conversation. Message Waiting Indication (MWI) on each Endurance telephone was also tested. A voice mailbox is setup for each Endurance telephone in order to allow a voicemail message to be left and MWI initiated.

Note: The voicemail system used during Compliance Testing was Avaya IP Office Voicemail Pro.

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 Endurance telephone models tested for interoperability with IP Office are listed in **Section 4** of these Application Notes. All test cases were performed manually. Calls were made to/from each Endurance model telephone to a variety of Avaya deskphones. Calls to/from the Public Switched Telephone Network (PSTN) were also included. The main objectives were to verify the following:

- Basic Call (Including calling number display, if display equipped)
- Call termination (origination/destination)
- Hold
- Consultative Hold
- Unattended Transfer
- Attended Transfer
- Call forward
- Short Codes
- DTMF
- Message Waiting Indication

2.2. Test Results

Tests were performed to insure full interoperability between Endurance 10CA, 20CA and 30CA telephones and Avaya 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:

Endurance 10CA:

1. LED on handset does not flash during ringing.
2. If the MWI lamp is lit, it will go out during ringing or while on a call, the lamp will light again when the telephone goes back to idle.
3. If the MWI lamp is lit, it goes out when the handset is lifted from the telephone cradle, the lamp will light again when handset is returned to the telephone cradle.

Endurance 20CA:

1. LED on handset does not flash during ringing.
2. If the MWI lamp is lit, it will go out during ringing or while on a call, the lamp will light again when the telephone goes back to idle.
3. If the MWI lamp is lit, it goes out when the handset is lifted from the telephone cradle, the lamp will light again when handset is returned to the telephone cradle.

Endurance 30CA

1. If the MWI lamp is lit, it will go out during ringing or while on a call, the lamp will light again when the telephone goes back to idle.
2. If the MWI lamp is lit, it goes out when the handset is lifted from the telephone cradle, the lamp will light again when handset is returned to the telephone cradle.

2.3. Support

Technical support from InterQuartz can be obtained through the following:

Web: http://www.interquartz.co.uk
Phone: +441617633122
E-mail: support@interquartz.co.uk

3. Reference Configuration

Figure 1illustrates a sample configuration consisting of Avaya IP Office 500v2 platform with digital and analogue modules. The Endurance telephones are connected to Avaya IP Office via the analogue module. An Avaya 9630 H.323 IP Deskphone, and 2420 Digital Deskphone were included to demonstrate calls to/from the Endurance telephones. A simulated PSTN was also configured to test calls to/from the Endurance telephones.

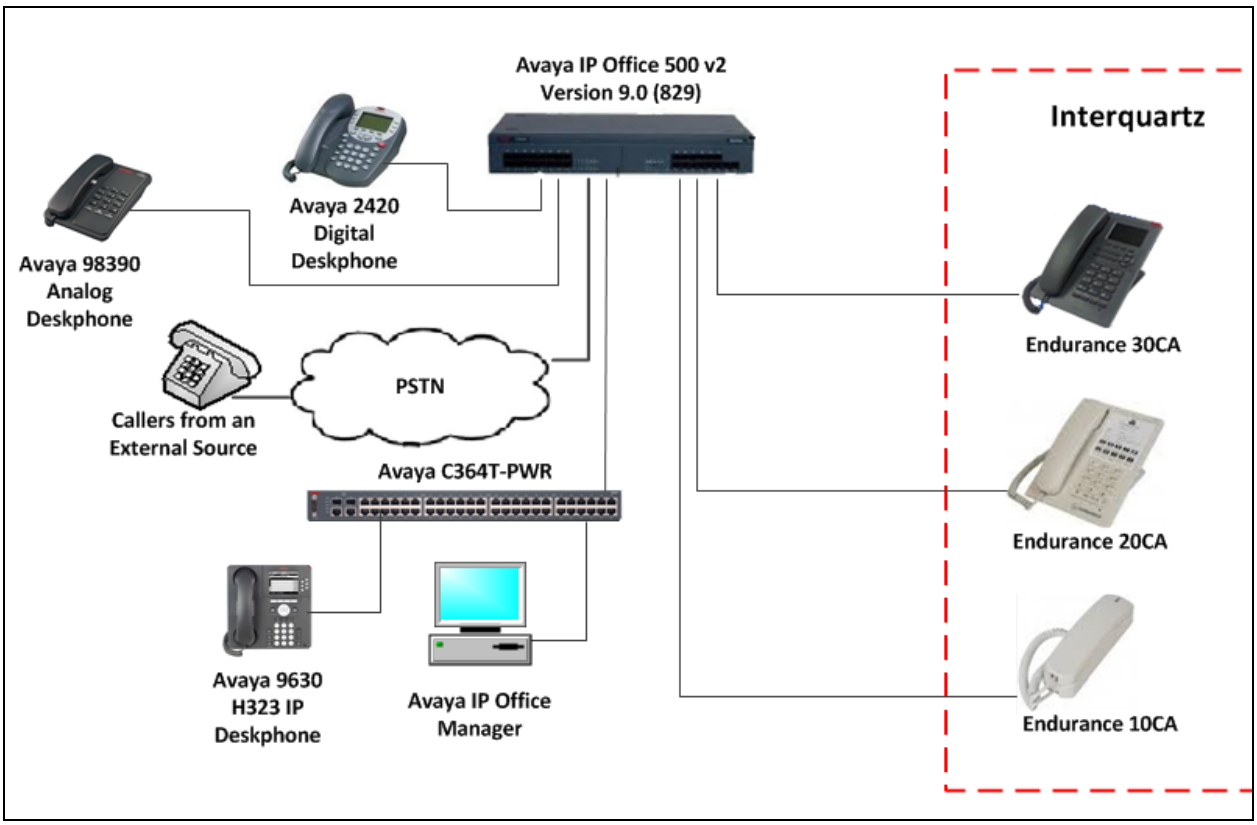


Figure 1: Avaya and Interquartz Reference Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office 500v2 Phone8 Analog Module DIGSTA8 Digital Module	9.0 Build 829 9.0.0.829 9.0.0.829
Avaya IP Office Voicemail Pro	9.0.0.829
Avaya IP Office Manager	9.0 Build 829
Avaya 9630 IP Deskphone (H.323)	Release 3.2
Avaya 2420 Digital Deskphone	--
Avaya Analog 98390Deskphone	N/A
Interquartz Equipment	**Software / Firmware Version**
Endurance Telephones 10CA, 20CA, 30CA	N/A

Note: Testing was performed with IP Office 500 v2 R9.0, but it also applies to IP Office Server Edition R9.0. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R9.0 to support analog or digital endpoints or trunks. IP Office Server Edition does not support TAPI Wave or Group Voicemail.

5. Avaya IP Office Configuration

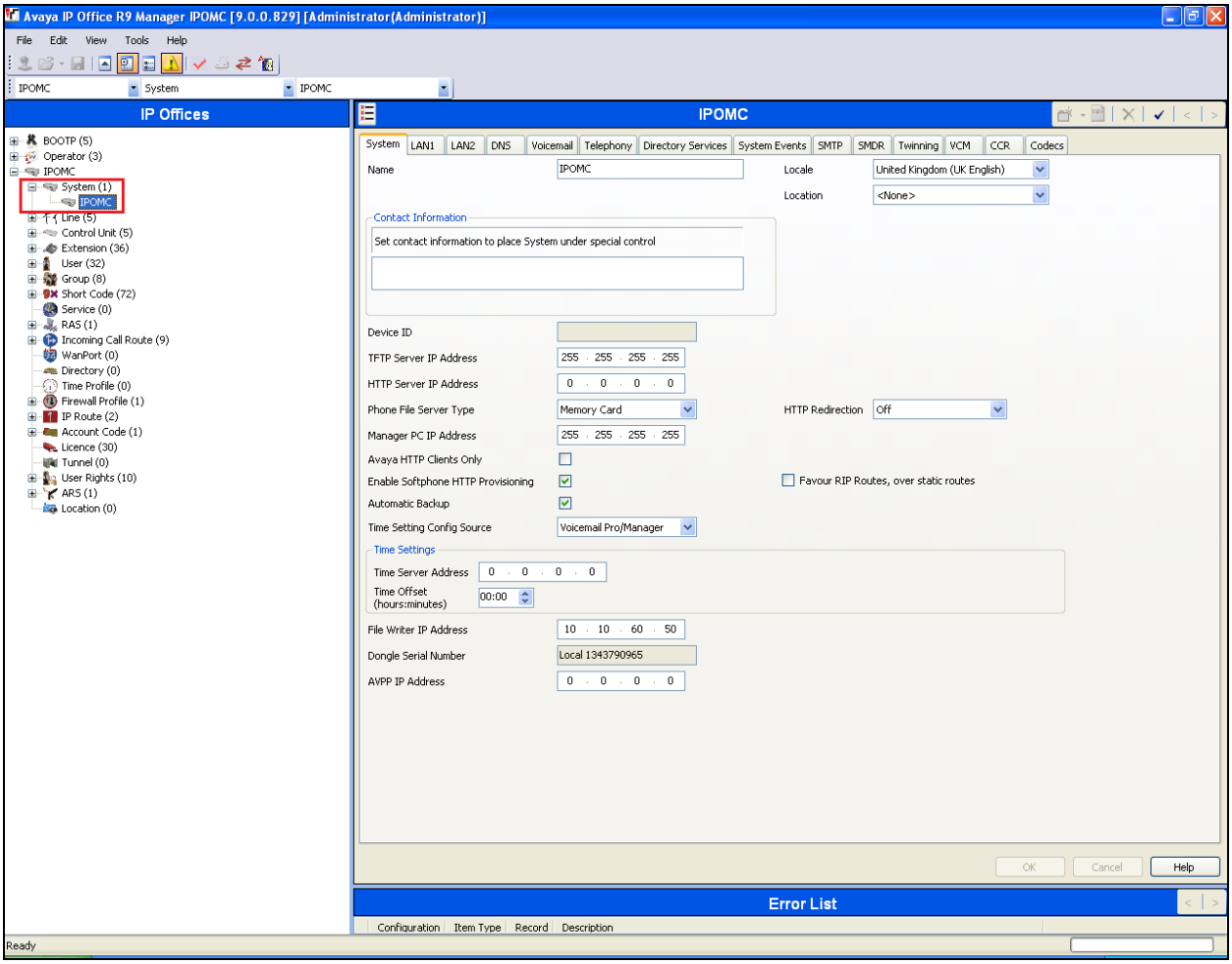
Configuration and verification operations on the Avaya IP Office illustrated in this section were all performed using Avaya IP Office Manager. The information provided in this section describes the configuration of the Avaya IP Office for this solution. It is implied a working system is already in place with the necessary licensing. 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
- Configure System Locale
- Create Analogue Extensions for Endurance telephones
- Create Users for Endurance telephones
- Save Configuration

Note: The configuration of Avaya IP Office Voicemail Pro is outside the scope of these Application Notes.

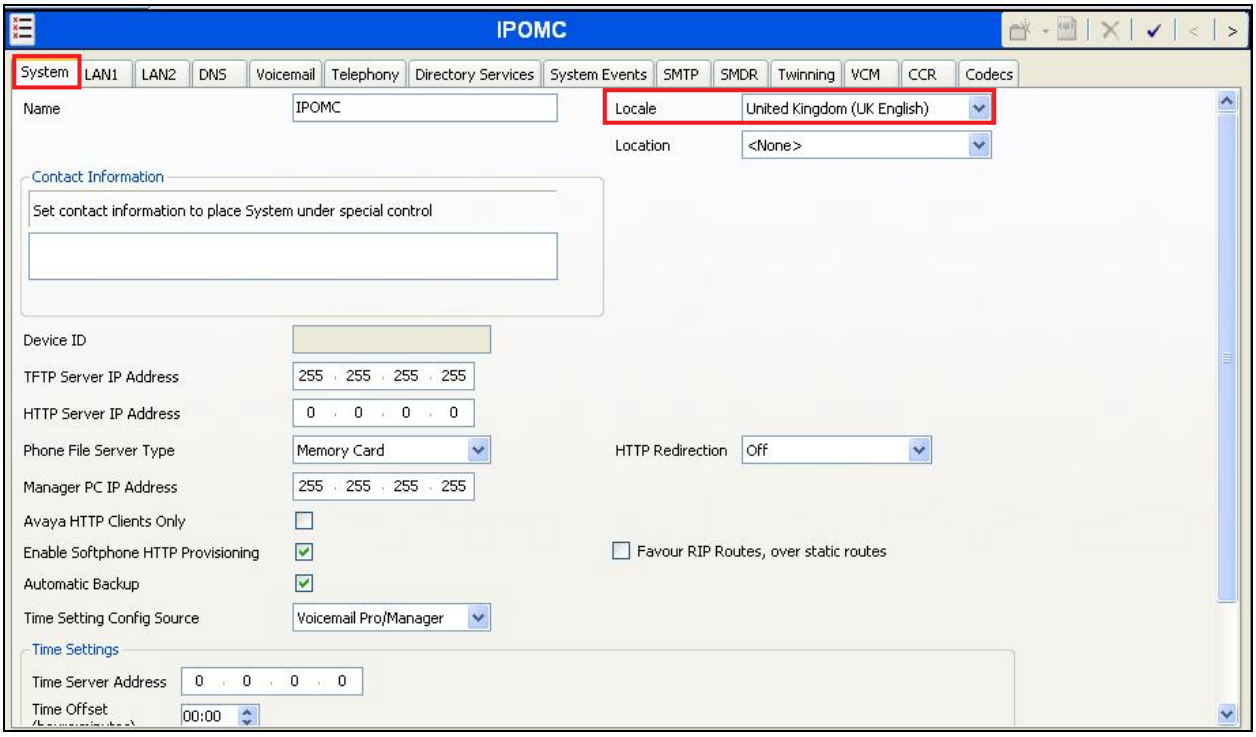
5.1. Launch Avaya IP Office Manager

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).



5.2. Configure System Locale

The Locale is usually the country were the IP Office is installed. By selecting the correct country a number of system defaults for that country will be used by the IP Office. To configure the Locale, select **System** from the IP Office Configuration Tree (not shown). During compliance testing the System was called IPOMC. In the right hand pane select the **System** tab, and from the **Locale** dropdown box select the appropriate country (i.e. **United Kingdom (UK English)**). Click the **OK** button to save (not shown).

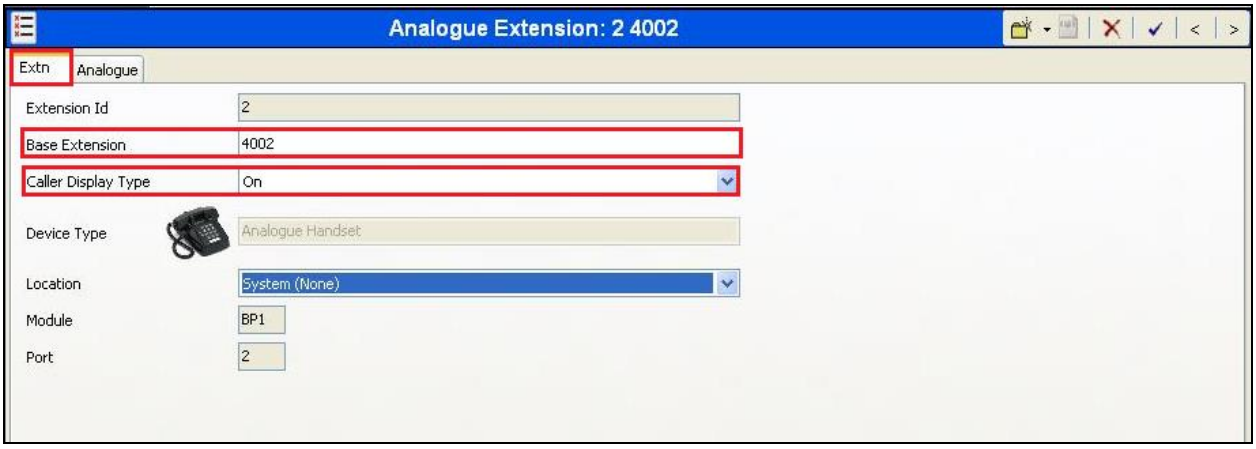


5.3. Create Analogue Extensions for Endurance Telephones

The Endurance telephones are configured as Analogue Extensions on the IP Office. From the configuration tree in the IP Office pane, click on **Extension**, and select an available analogue extension (not shown). Click on the **Extn** tab and enter the following:

- **Base Extension** Enter the number used for this extension (i.e. 4002)
- **Caller Display Type** Select the appropriate setting from the dropdown box.

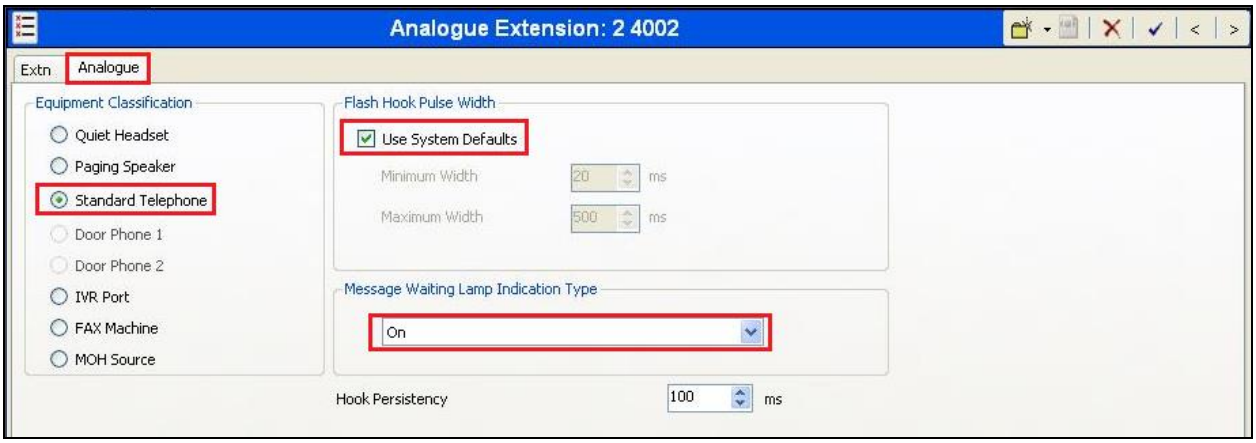
Defaults were used for the remaining fields.



Click on the **Analogue** tab and enter the following:

- **Standard Telephone** — Click the radio button in the **Equipment Classification** section
- **Use System Defaults** — Click the check box in the **Flash Hook Pulse Width** section
- **Message Waiting Lamp Indication Type** — Select **On** from the dropdown box. Selecting **On** will ensure that the **Message Waiting Lamp Indication Type** settings will be based on the **Locale** selected in **Section 5.2**

Defaults were used for the remaining fields. Click on the **OK** button to save (not shown).

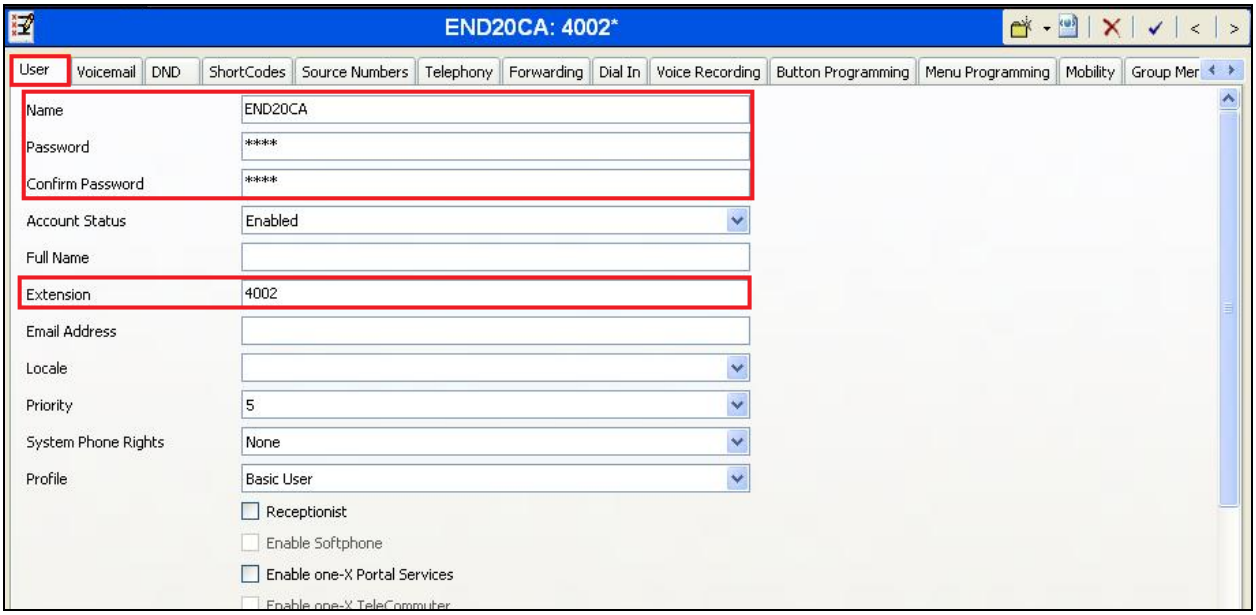


5.4. Create Users for Endurance Telephones

From the configuration tree in the IP Office pane, right click on **User**, and select **New** (not shown). Click on the **User** tab and enter the following:

- **Name** Enter a name for the user (i.e. END20CA)
- **Password** Enter an appropriate password (Only applicable if user applications and/or Dial In access is required)
- **Confirm** Confirm the password
- **Extension** Enter the **Extension** number as configured in **Section 5.3**

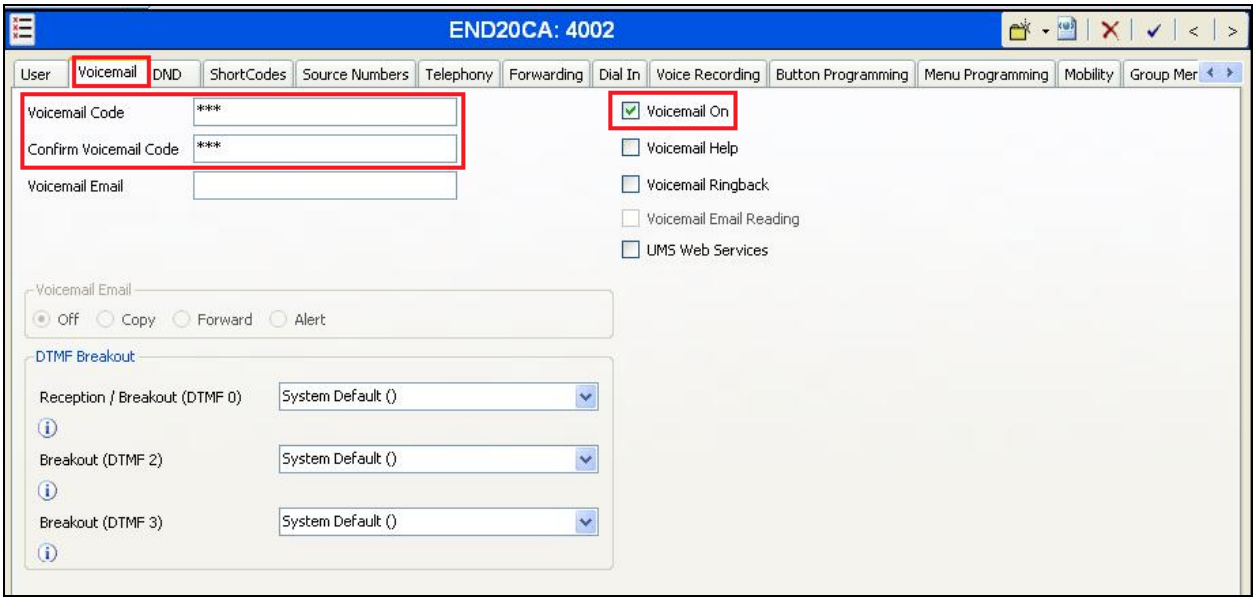
Defaults were used for the remaining fields.



Click on the **Voicemail** tab and enter the following:

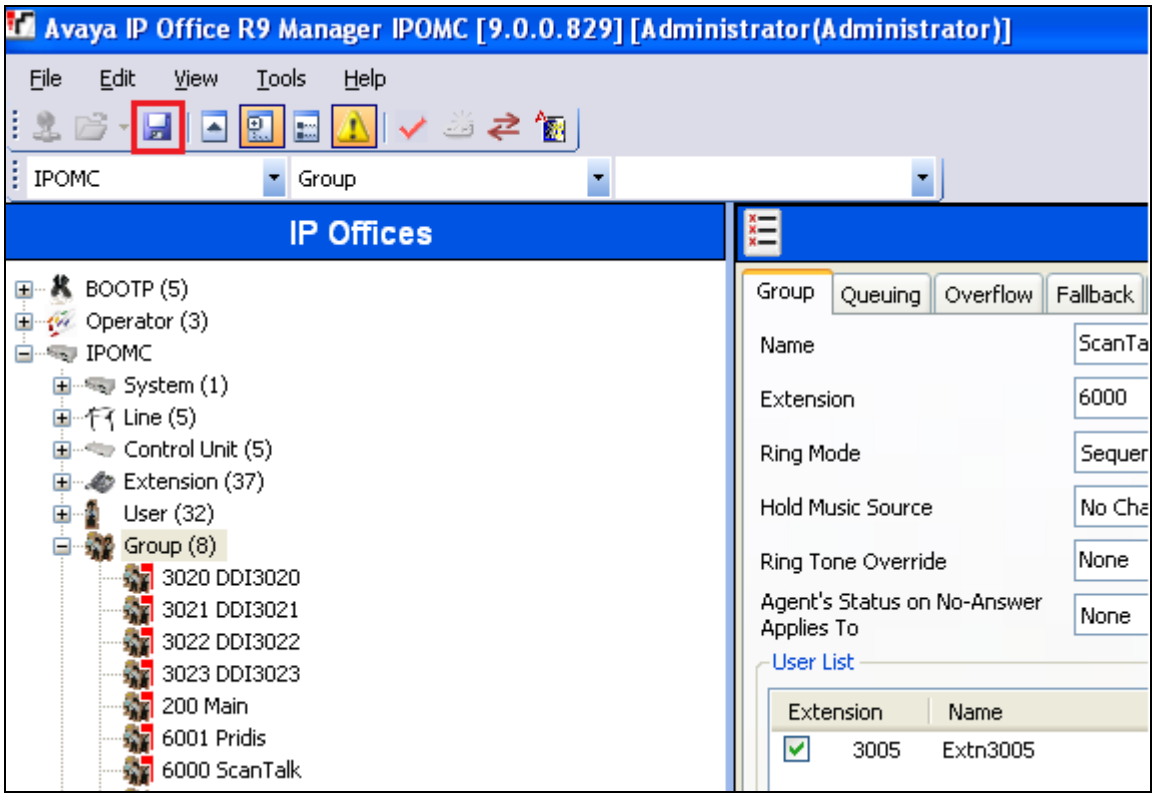
- **Voicemail Code** Enter a code to validate access to the Voicemail mailbox
- **Confirm Voicemail Code** Confirm the code
- **Voicemail On** Click the check box

Defaults were used for the remaining fields and tabs. Click on the **OK** button to save (not shown).

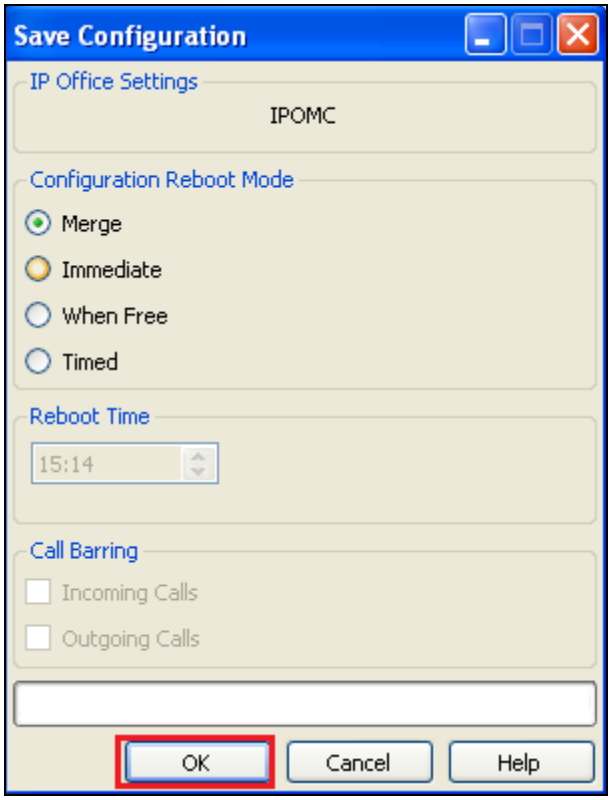


5.5. Save Configuration

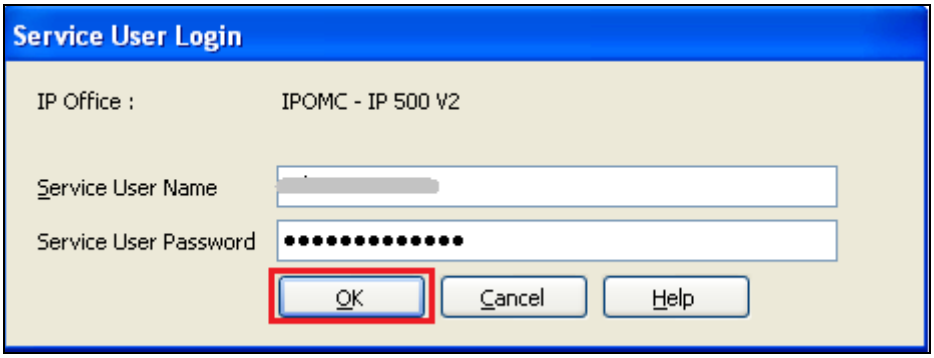
Once all the configurations have been made it must be sent to the IP Office. Click on the Save Icon as shown below.



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



When the **Service User Login** Window opens enter the appropriate credentials and click the OK button.



6. Configure Endurance Analogue Telephones

There is no configuration required for the Interquartz Endurance Analogue telephones to work with the Avaya IP Office. To operate the Endurance telephones, refer to the user guide that is provided with these telephones.

7. Verification Steps

The following steps may be used to verify the configuration:

- Place calls to and from the Endurance telephone and verify that the calls are successfully established with two-way talk path.
- Perform basic call handling including, call hold/unhold and call transfers.
- Leave a voice message on an Endurance telephone from another telephone by calling the Endurance telephone that covers to voice mail. Verify that the MWI on the Endurance telephone is activated.
- Then, retrieve the voice message using the Endurance telephone and verify that the MWI is deactivated.

8. Conclusion

A full and comprehensive set of feature and functional test cases were performed during Compliance testing. Interquartz Endurance telephones as listed in **Section 4** are considered compliant with Avaya IP Office 500v2 9.0. All test cases have passed and met the objectives with some observations as stated 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 the local Avaya representative.

[1] Avaya IP Office Manager 9.0, Document 15-601011, Issue 9.01, September 2013

Product Documentation for Interquartz can be obtained at: http://www.interquartz.co.uk

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.