# Avaya Solution & Interoperability Test Lab

# Application Notes for Configuring Avaya IP Office 500 with TigerTMS Hotel Pro- Issue 1.0

## Abstract

These Application Notes describe the configuration steps required for Avaya IP Office 500 R8.1 with TigerTMS Hotel Pro 50.0.

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.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

1 of 24
TigerTMSHPIPO81

# 1. Introduction

TigerTMS Hotel Pro (Hotel Pro) is a graphical hospitality user interface. It is commonly used in hotels to provide a means of controlling usage of room facilities. Hotel Pro utilizes XML based communication for hospitality control of the IP Office. Hospitality features are translated into a set of XML commands which are passed via a secure IP port to the IP Office.

The following main features provided by Hotel Pro interface with Avaya IP Office:

- **Check-In** - This function is used to assign a new guest to a particular room with a telephone. The credentials of the guest are used to update the station configuration within Avaya IP Office. This includes the display name of the phone as well as calling restrictions and Message Waiting Indicator (MWI) updates.
- **Direct Dialling in (DDI)** - This function is used to allocate a DDI to a room telephone extension. When DDI is allocated to a checked-in room, the room can be accessed externally, by making an inbound external call to a DDI number.
- **Update** - A facility that updates the display name of the station in Avaya IP Office.
- **Room Transfer** - This allows a guest to transfer to a different unoccupied room and it results in transfer of the guest's extension configuration.
- **Telephone Service Class** - Tiger allows two telephone service classes: "Barred" and "Unbarred" which refer to barring or permitting external calls. On check-in, user rights are set to "Unbarred" in IP Office, however this can be overridden to "Barred" if guest wishes so through Update facility. On check-out the user-rights are set to "Barred
- **Message Waiting** - Tiger Hotel Pro allows messages to be left for guests. The Message Waiting Indication (MWI) phone feature alerts the guest to a voice message.
- **Check-out** - Once a guest has vacated a room, this function resets the telephone to default configuration and sets call barring of external calls.
- **Maid Status** – Maid Status is a mechanism allowing the room status to be updated in Hotel Pro by minimal telephone interaction. This is often used to indicate room ready status following cleaning.

# 2. General Test Approach and Test Results

The general test approach was to configure the Hotel Pro to communicate with the Avaya IP Office (IP Office) as implemented on a customer's premises. Feature functionality testing was performed manually.

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.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

2 of 24
TigerTMSHPIPO81

## 2.1. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing. The feature testing evaluated the ability of TigerTMS Hotel Pro to carry out hospitality functions through XML based communication with IP Office. The serviceability testing introduced failure scenarios to see if Tiger Hotel Pro could resume after a link failure with IP Office.
The testing included:
- Check-In
- DDI
- Update Name
- Room Transfer
- Telephone Service Class
- Message Waiting
- Check-out
- Room Status
- Link Failure/Recovery
- Test Results

## 2.2. Test Results

Tests were performed to insure full interoperability between TigerTMS Hotel Pro and IP Office. The tests were all functional in nature and performance testing was not included. All the test cases passed successfully.

## 2.3. Support

Technical support from TigerTMS can be obtained through the following:
Phone:       Technical Support Department
                 +44 1425 891 090
E-mail:      support@tigertms.com

# 3. Reference Configuration

**Figure 1** illustrates the network topology used during compliance testing. The Avaya solution consists of an IP Office which has a TCP/IP link established to the TigerTMS server. From the Tiger Hotel Pro, XML commands were passed via secure IP port on the IP Office for replication of the hospitality features. Digital, H323 and Softphones were configured on the IP Office to generate outbound/inbound calls to/from the PSTN. A QSIG trunk was configured to connect to the PSTN.
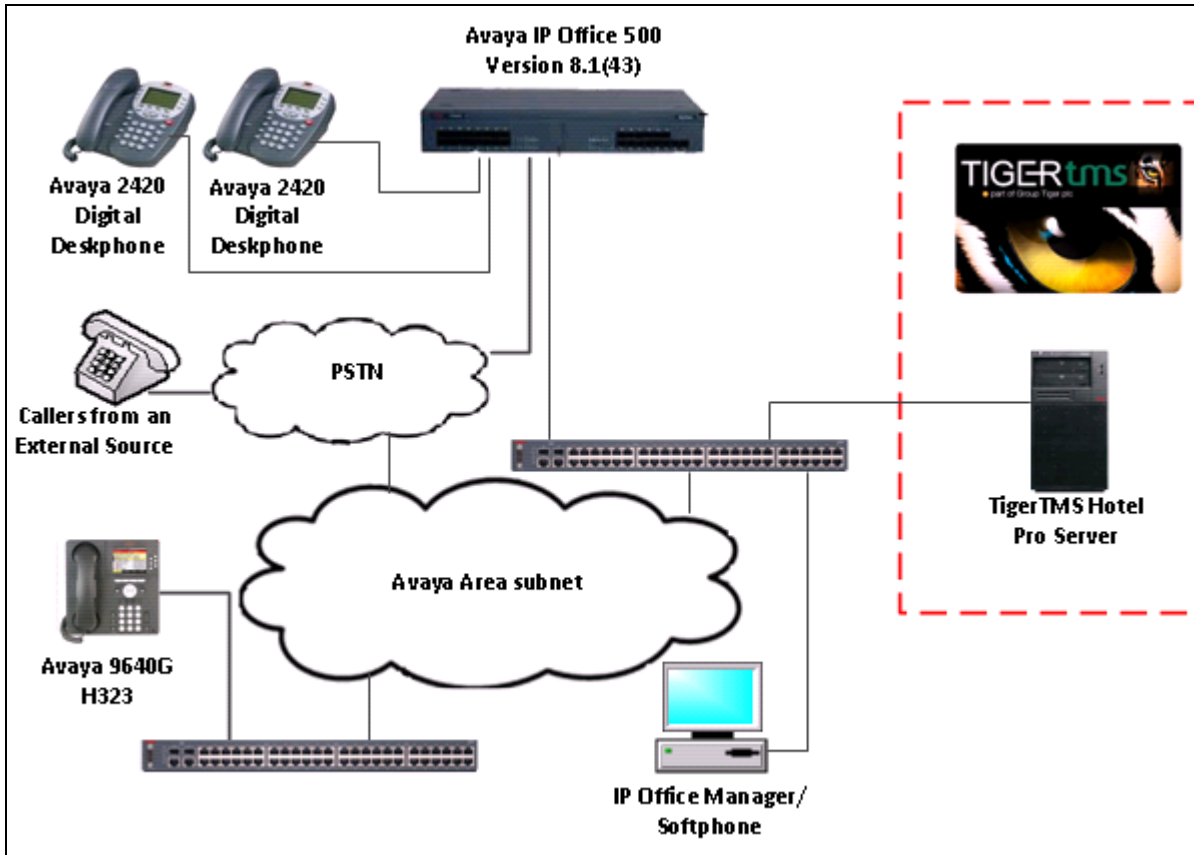


**Figure 1: Avaya IP Office and TigerTMS Hotel Pro Reference Configuration**

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

4 of 24
TigerTMSHPIPO81

# 4. Equipment and Software Validated

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

| Avaya Equipment | Software / Firmware Version |
|---|---|
| Avaya IPO 500 | 8.1(43) |
| Avaya 9640G IP Telephone | H323 S3.104S |
| Avaya 2420 Digital Telephones | -- |
| Avaya IP Office softphone | 3.2.3.48 |
| **TigerTMS Equipment** | **Software / Firmware Version** |
| Generic Server running Windows XP Professional 2002 SP3 | TigerTMS Hotel Pro 50.0 |

**Note:** Testing was performed with IP Office 500 R8.1, but it also applies to IP Office Server Edition R8.1. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R8.1 to support analog or digital endpoints or trunks**.**
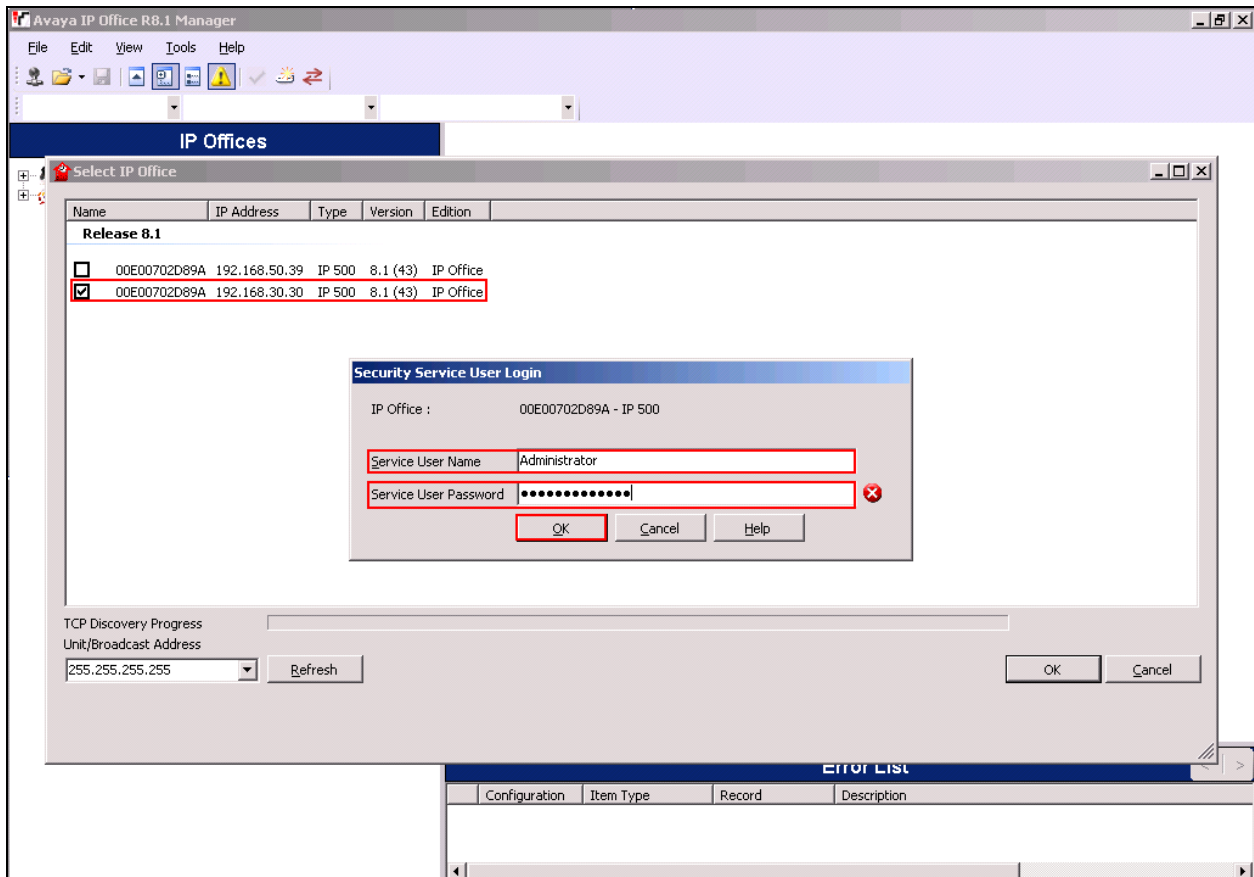
# 5. Avaya IP Office Configuration

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 and all Users/Extensions are configured including (Room Status Extensions). 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:
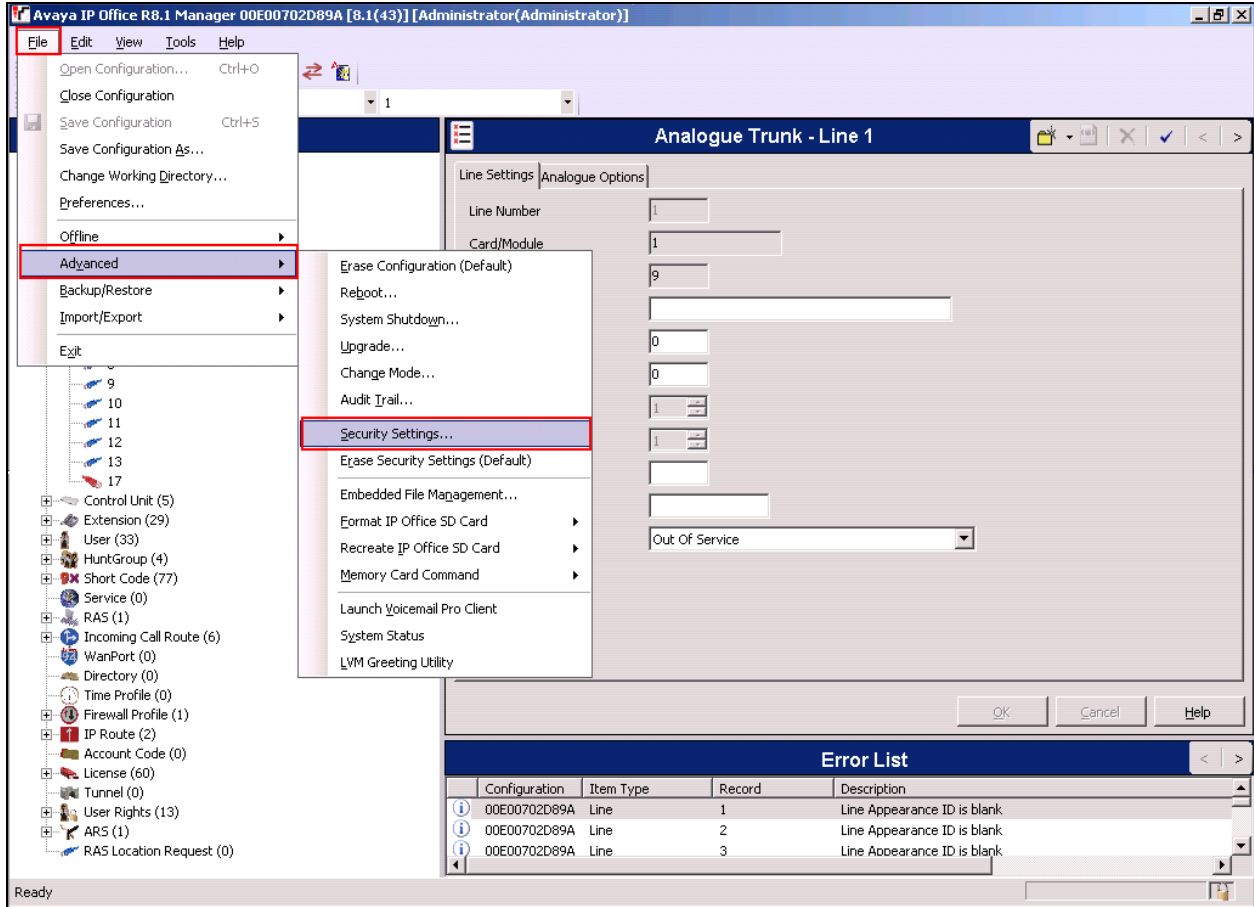
- Launch Avaya IP Office Manager (Security)
- Security Level
- Launch Avaya IP Office Manager (Administration)
- Modify User Rights (Barred)
- Modify User Rights (Unbarred)
- Create DDI Hunt Groups
- Save Configuration

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

5 of 24
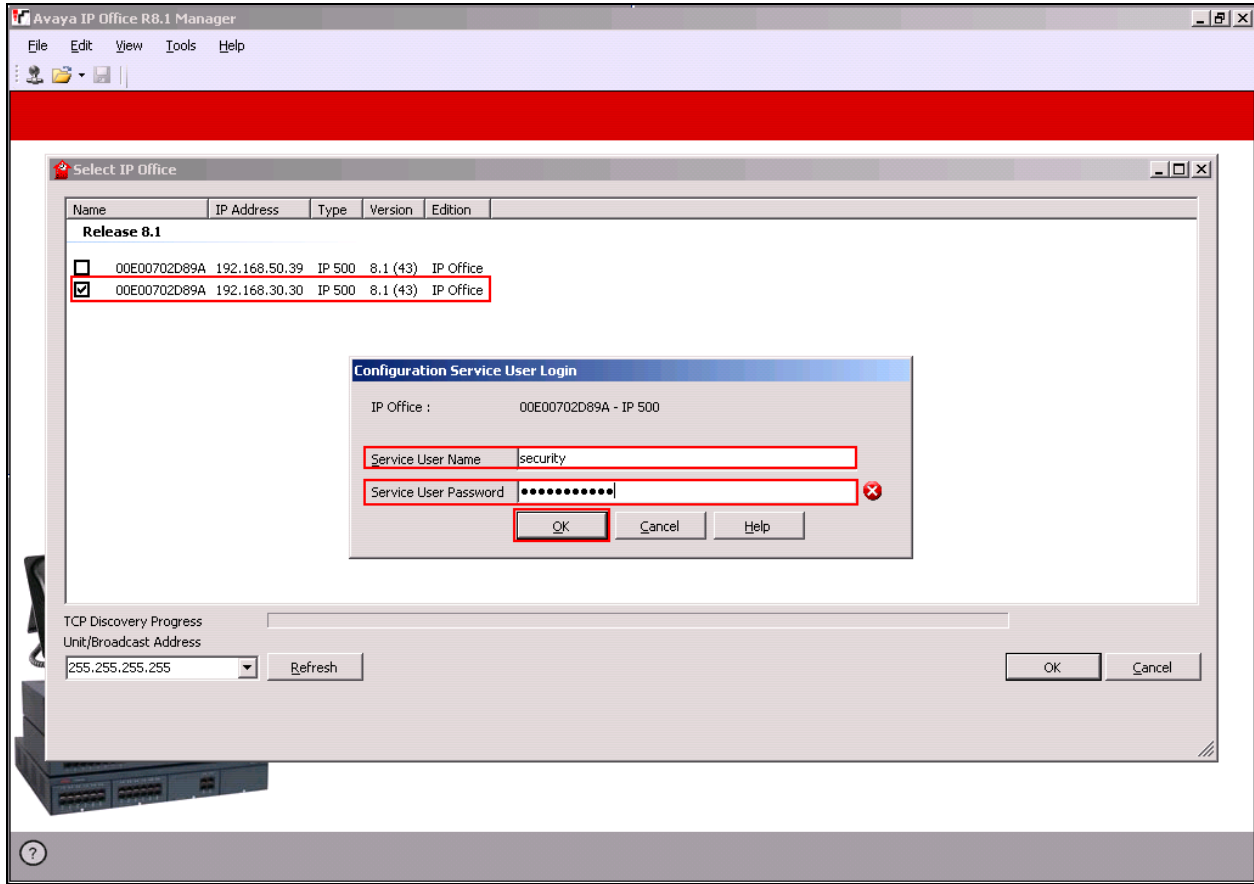TigerTMSHPIPO81

## 5.1. Launch Avaya IP Office Manager (Security)

To Log in as a Security administrator first Log in as Administrator. From the IP Office Manager PC, go to **Start→Programs→IP Office→Manager** to launch the Manager application. Select **File →Open Configuration** then select the appropriate IP Office. Log in to IP Office using the **Service User Name** of **Administrator** and the appropriate **Service User Password** and click on the **OK** button. During compliance testing the System was called **00E00702D89A**.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

6 of 24
TigerTMSHPIPO81

Once the Configuration is opened select **File** → **Advanced** → **Security Settings**.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
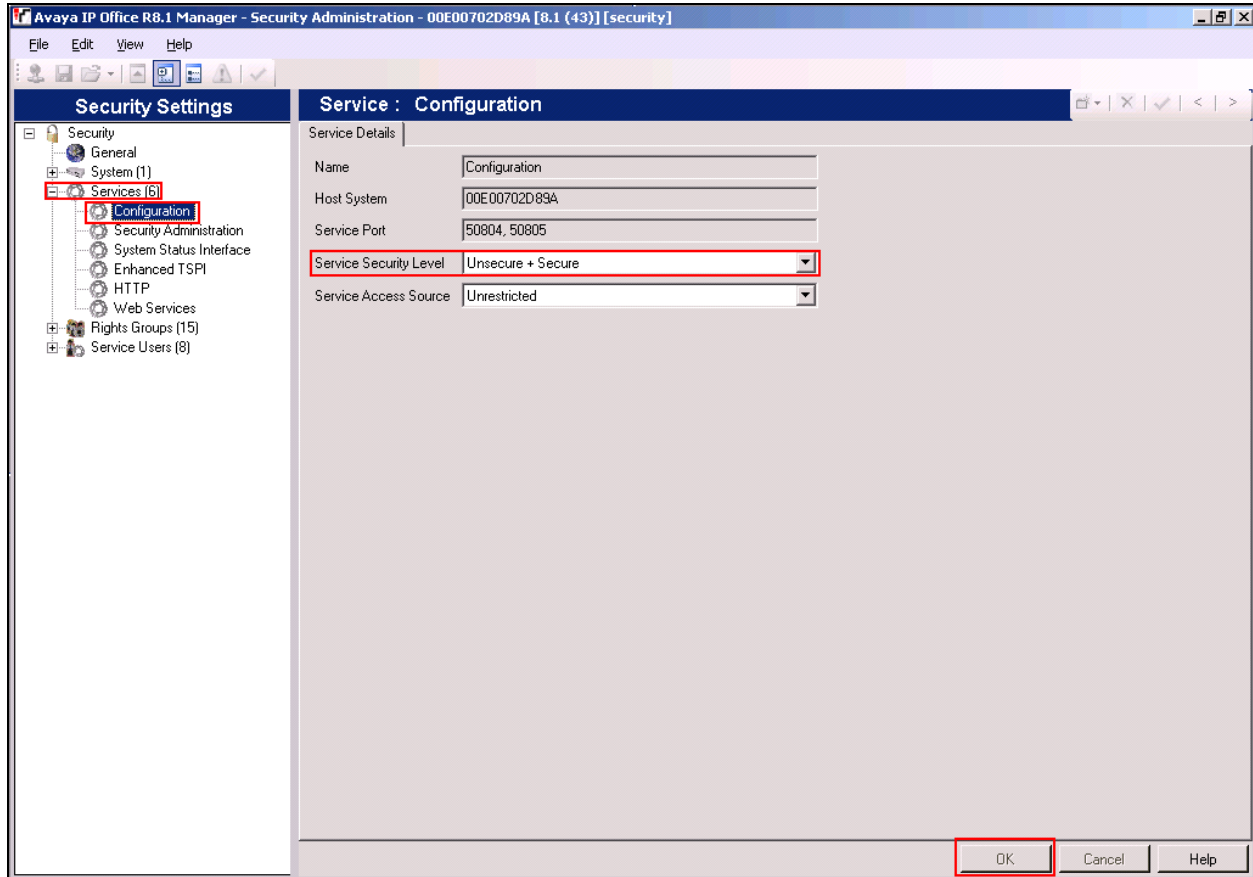©2013 Avaya Inc. All Rights Reserved.

7 of 24
TigerTMSHPIPO81

In the **Configuration Service User Login** window Log in using the **Service User Name** of **security** and the appropriate **Service User Password** and click **OK**.
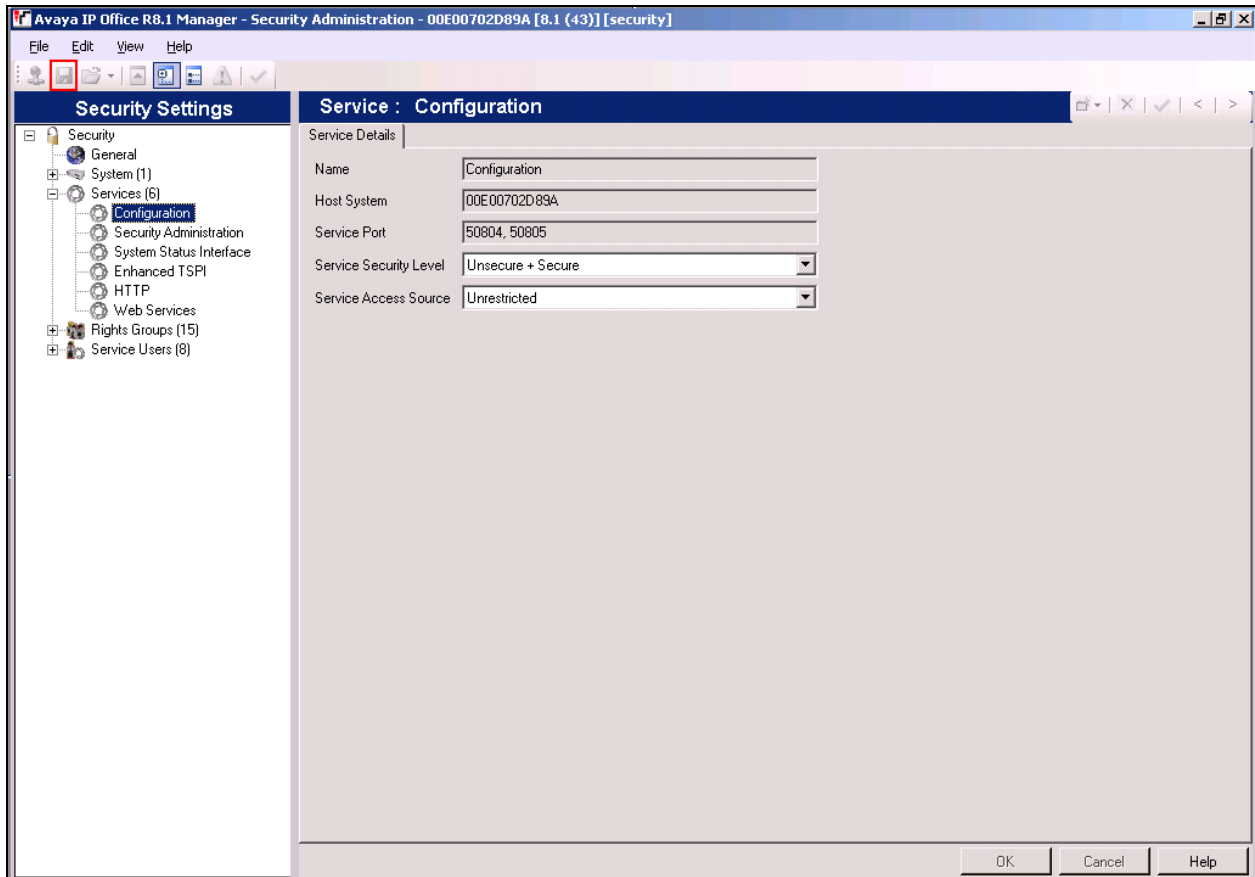
Solution & Interoperability Test Lab Application Notes
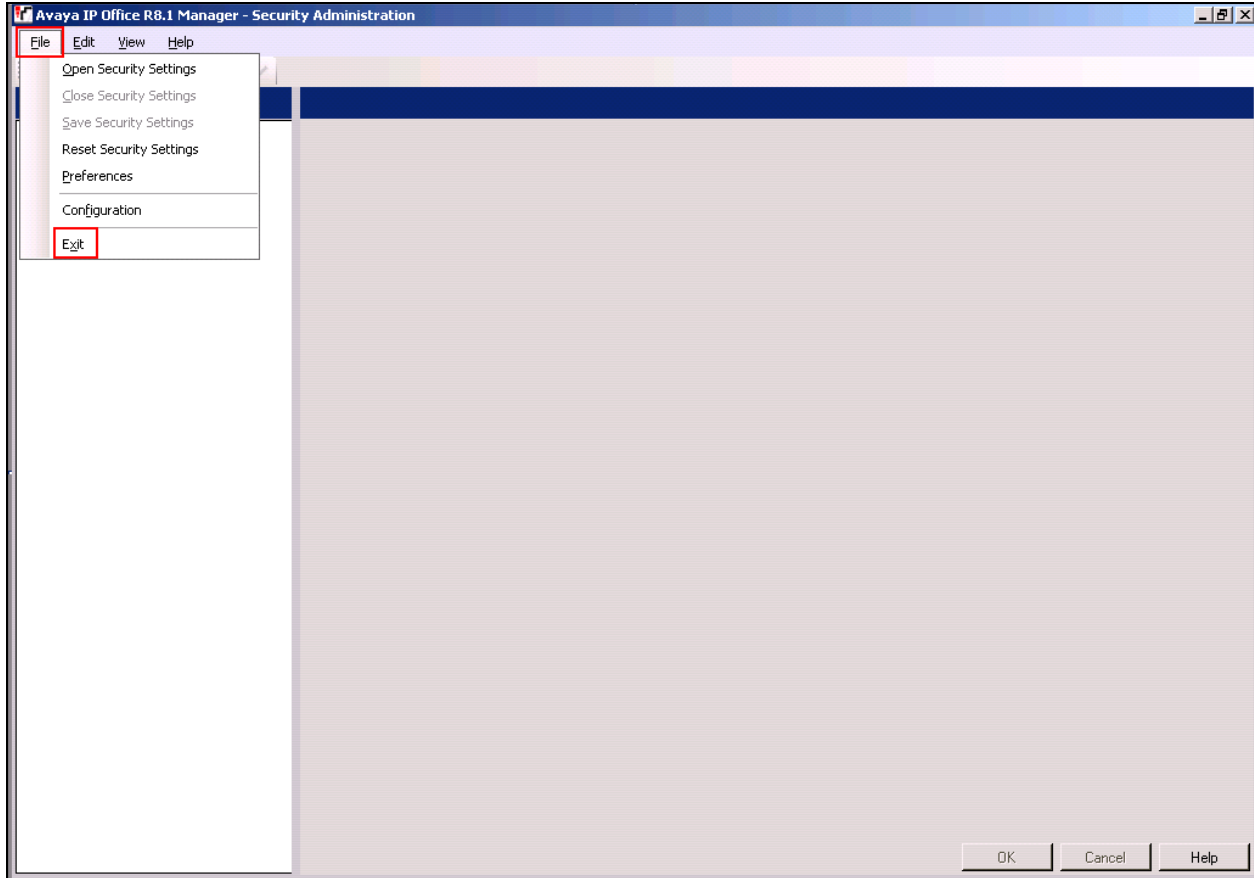©2013 Avaya Inc. All Rights Reserved.

## 5.2. Security Level

Once the **Security Administration** page opens, select **Services → Configuration** and select **Unsecure + Secure** from the **Service Security Level** drop-down box and click **OK**.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

9 of 24
TigerTMSHPIPO81

Click on the **Save** icon (on top menu) to save the new setting. Enter the appropriate **Service User Name** and **Service User Password** and click on **OK** button to complete (not shown).
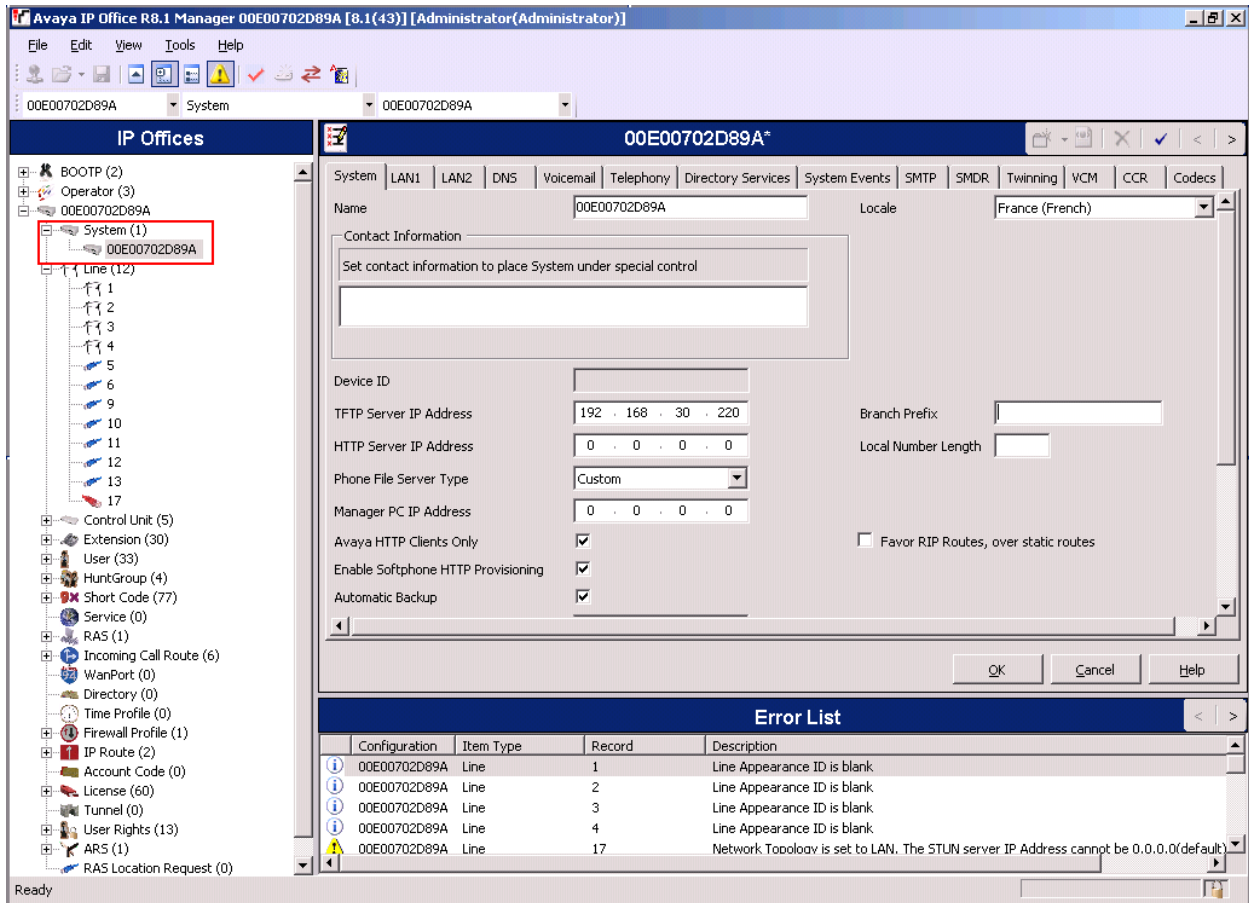
To log out of the **Security Administration** click **File → Exit**.
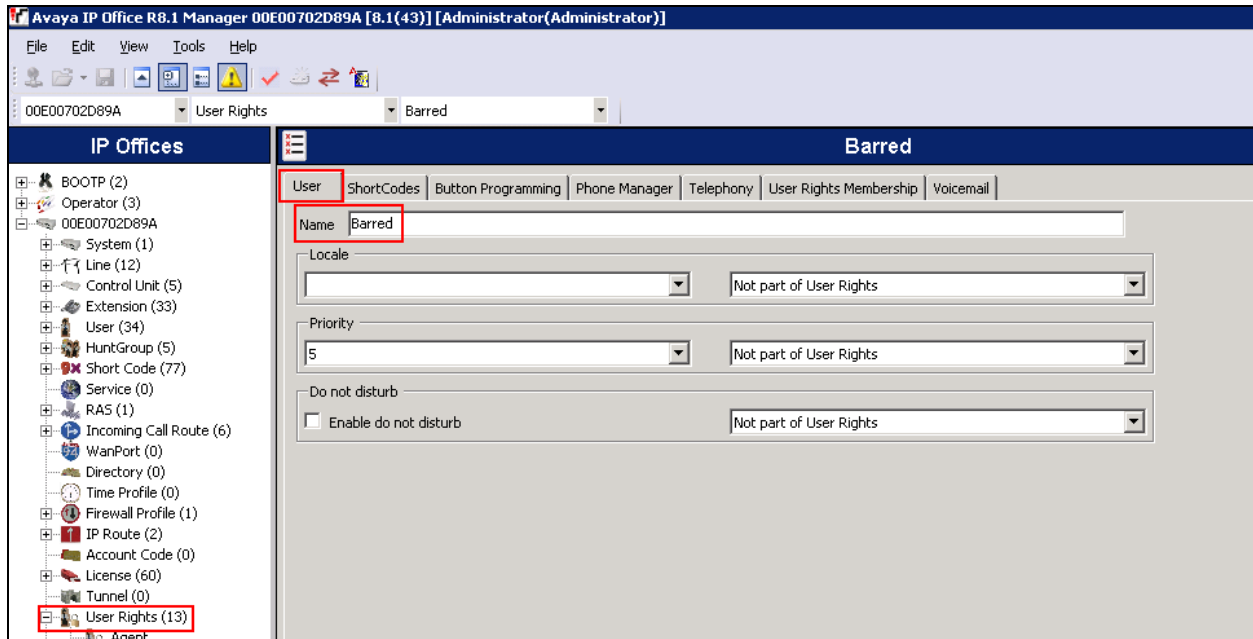
MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

11 of 24
TigerTMSHPIPO81

## 5.3. Launch Avaya IP Office Manager (Administration)

From the IP Office Manager PC, click **Start→Programs→IP Office→Manager** to launch the Manager application. Log in to IP Office using the appropriate credentials (not shown) to receive the IP Office configuration.
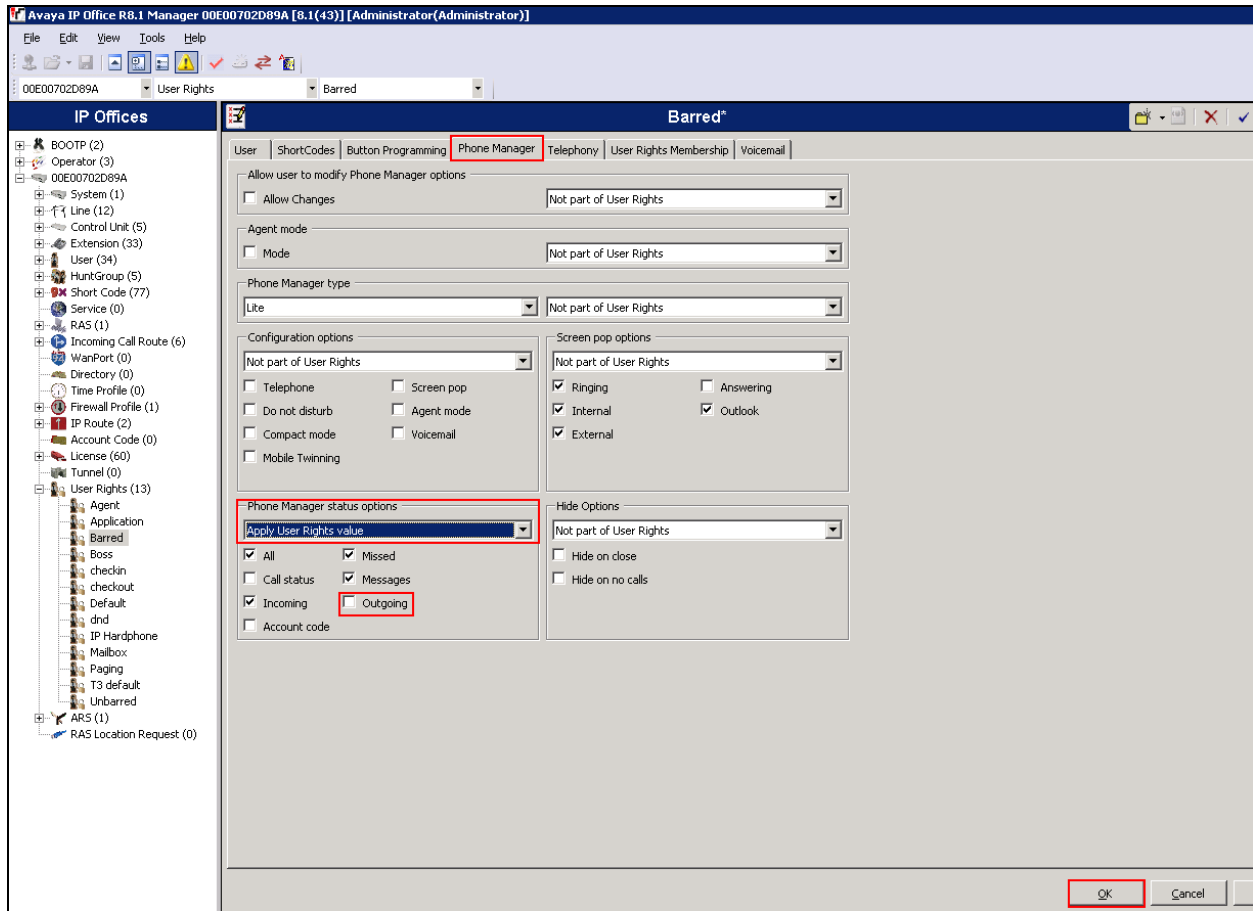
MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

12 of 24
TigerTMSHPIPO81

## 5.4. Modify User Rights (Barred)

In the Manager window expand Configuration Tree. Right click on **User Rights,** and select the **New** option (not shown). When the New User Rights window appears click on the **User** tab. In the **Name** field set value **Barred**.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.
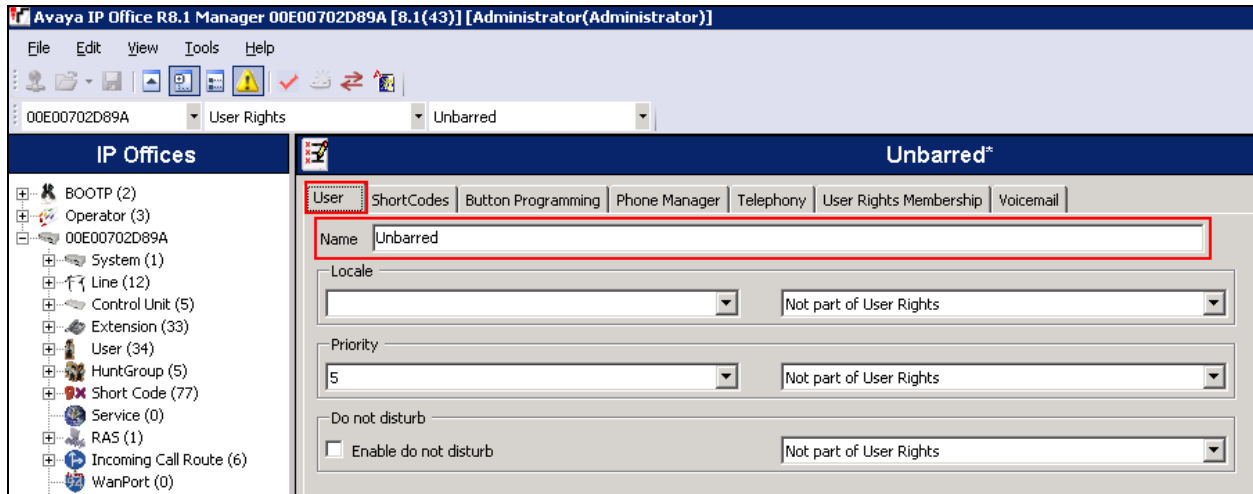
13 of 24
TigerTMSHPIPO81

Click on the **Phone Manager** tab. From the **Phone Manager status options** dropdown box select **Apply User Rights value**. Uncheck the **Outgoing** checkbox and click the **OK** button.
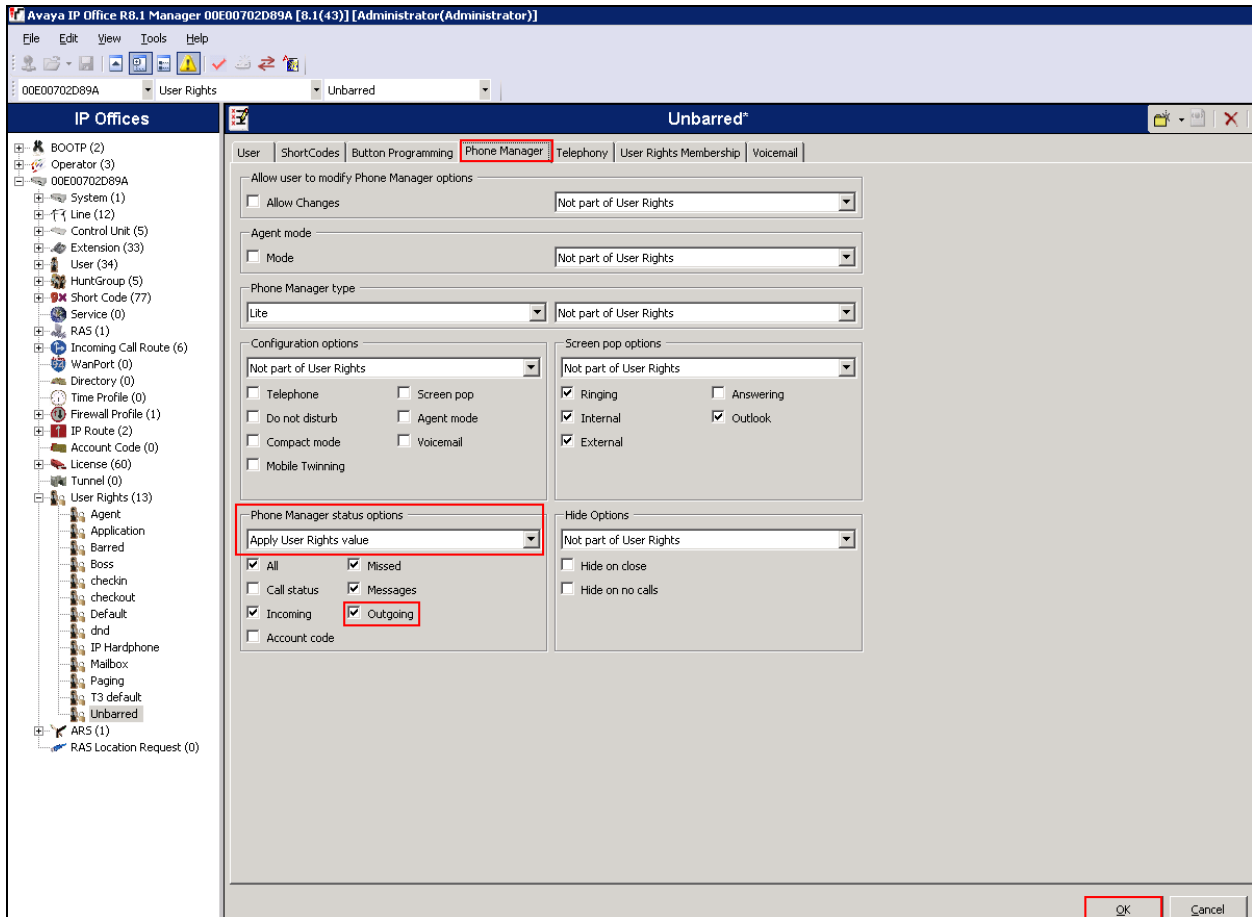
MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

14 of 24
TigerTMSHPIPO81

## 5.5. Modify User Rights (Unbarred)

In the Manager window expand Configuration Tree. Right click on **User Rights,** and select the **New** option (not shown). When the New User Rights window appears click on the **User** tab. In the **Name** field set value **Unbarred**.
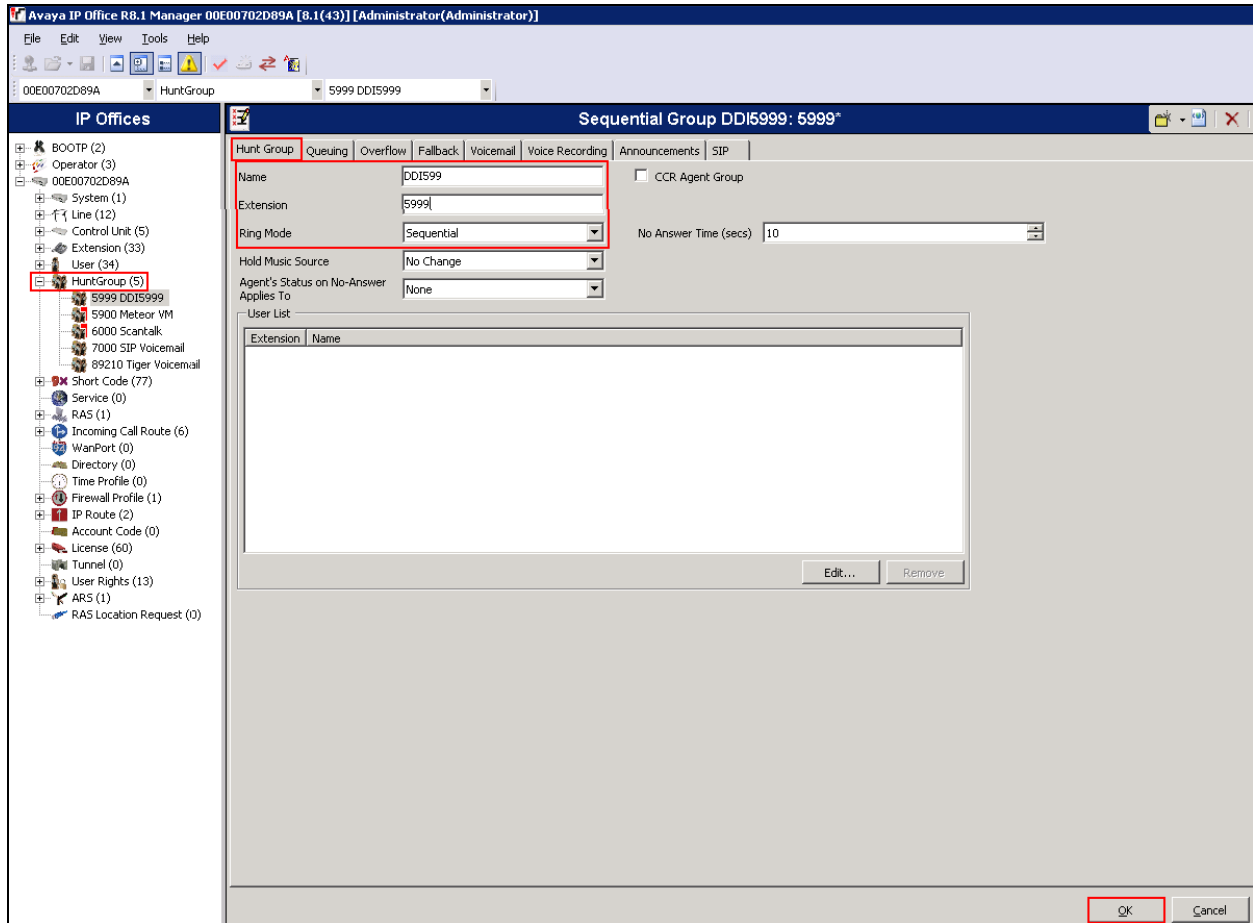
MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

15 of 24
TigerTMSHPIPO81

Click on the **Phone Manager** tab. From the **Phone Manager status options** dropdown box select **Apply User Rights value**. Check the **Outgoing** checkbox and click the **OK** button.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

16 of 24
TigerTMSHPIPO81

## 5.6. Create DDI Hunt Groups

In the Manager window, go to the Configuration Tree, right-click **Hunt Group** and select **New** in the popup that appears (not shown). In the subsequent Hunt Group window, set **Name** to something appropriate (e.g. **DDI5999**). Enter an **Extension** (e.g. **5999**) and set the **Ring Mode** to **Sequential**. Ensure that no extensions are added to the hunt group as they will be automatically added by the Tiger Hotel Pro once a DDI is allocated to an extension. Click the **OK** button. **Note:** Repeat this for each DDI required.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.
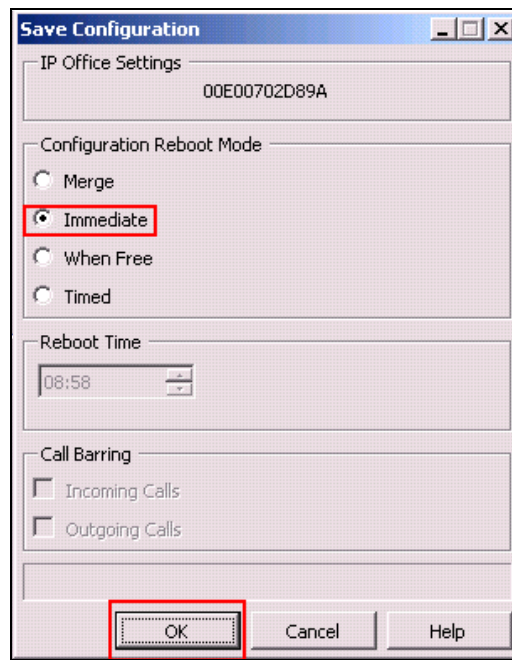
17 of 24
TigerTMSHPIPO81

## 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.
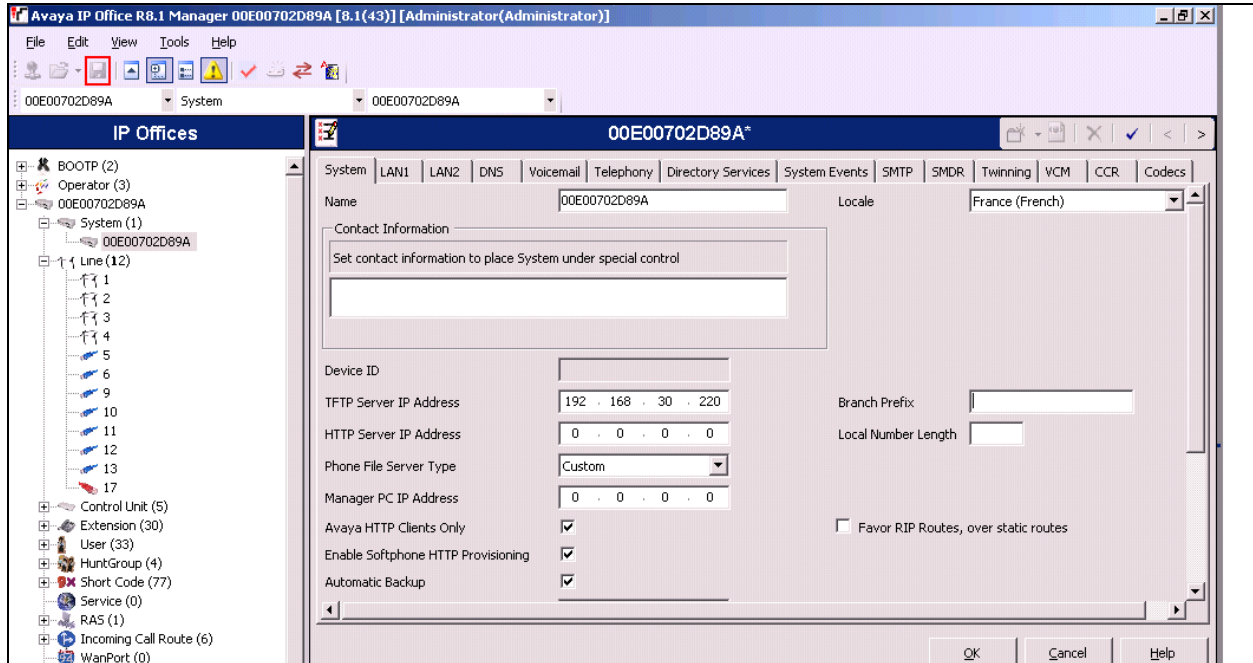


Once the **Save Configuration** window opens, click on the **Immediate** radio button followed by the **OK** button.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

18 of 24
TigerTMSHPIPO81

Once the **Service User Login** Window opens enter the appropriate credentials, and then click the **OK** button.



# 6. Configure TigerTMS Hotel Pro

This section describes the steps preformed to configure the TigerTMS Hotel Pro to connect to the IP Office. It is implied that the Hotel Pro Server software is already installed. 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:

- Modify Avaya Service Configuration File
- Restart AvayaIPOfficeClientService

**Note:** The configuration of Guest rooms etc. is outside the scope of this Application note.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

19 of 24
TigerTMSHPIPO81

## 6.1. Modify Avaya Service Configuration File

After installation and basic configuration, open the **AvayaService.INI** file located in the **<drive letter>:\tig2020\Avaya** and enter the following: (During compliance testing the following were used)

- **ipofficeunitip**: The IP address of Avaya IP Office
- **ipofficeunitport**: The Port used to talk to Avaya IP Office (in this case secure)
- **ipofficeusername**: Login user name for Avaya IP Office
- **ipofficepassword**: Login password for Avaya IP Office

Save and close the file.

After the configuration changes a server reboot is required.

```
<?xml version="1.0" encoding="UTF-8"?>
<sections>
  <section name="avayadebug">
    <item key="port" value="8000" />
    <item key="hostname" value="localhost" />
    <item key="level" value="10" />
    <item key="fileloggingon" value="True" />
    <item key="totallogfiles" value="10" />
    <item key="logfilesizemb" value="10" />
  </section>
  <section name="avayaipoffice">
    <item key="serviceurl"
value="http://localhost:80/AvayaIPOffice/service.svc" />
    <item key="serviceport" value="80" />
    <item key="ipofficeunitip" value="192.168.30.30" />
    <item key="ipofficeunitport" value="50805" />
    <item key="ipofficeusername" value="Administrator" />
    <item key="ipofficepassword" value="Administrator" />
    <item key="hiportno" value="7000" />
    <item key="messagedelaytime" value="1" />
    <item key="batchprocesstimeout" value="60" />
    <item key="batchprocessrecordstoprocess" value="10" />
    <item key="setconfigbatchtransactionflag" value="FALSE" />
  </section>
</sections>
```

MC; Reviewed:
SPOC 5/1/2013
Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.
20 of 24
TigerTMSHPIPO81

## 6.2. Restart AvayaIPOfficeClientService

Once the configuration changes are made the AvayaIPOfficeClientService needs to be restarted. To restart the AvayaIPOfficeClientService go to **Start → Run** and enter **services.msc**. Once the services window opens right click on **AvayaIPOfficeClientService** and select **Restart**.
**Note:** The **Startup** type for AvayaIPOfficeClientService should be set to **Automatic**.
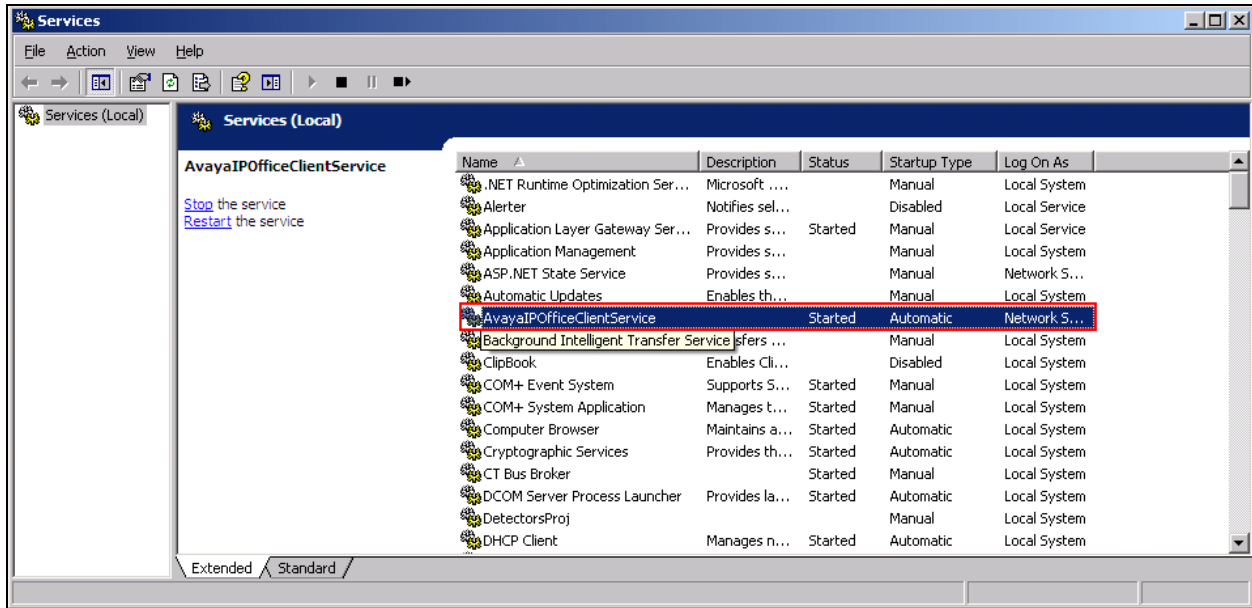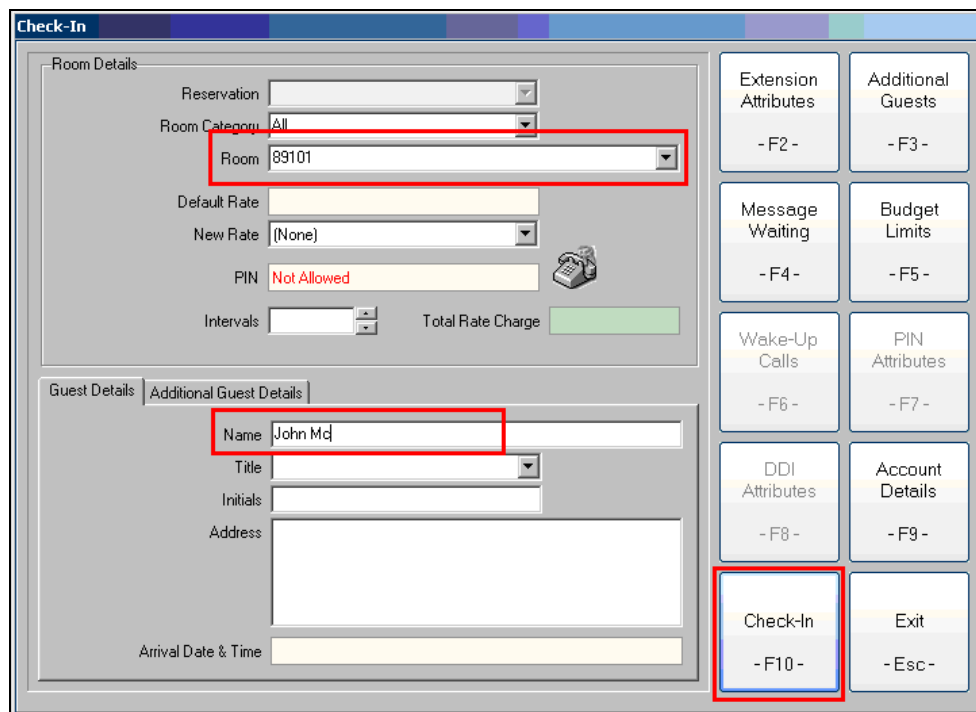
# 7. Verification Steps

This section provides the tests that can be performed to verify correct configuration of the IP Office and TigerTMS solution. Using the Tiger Hotel Pro Check-in hospitality function assign a room to a guest. In the Main Menu screen, click on **Check-In (F2)**.
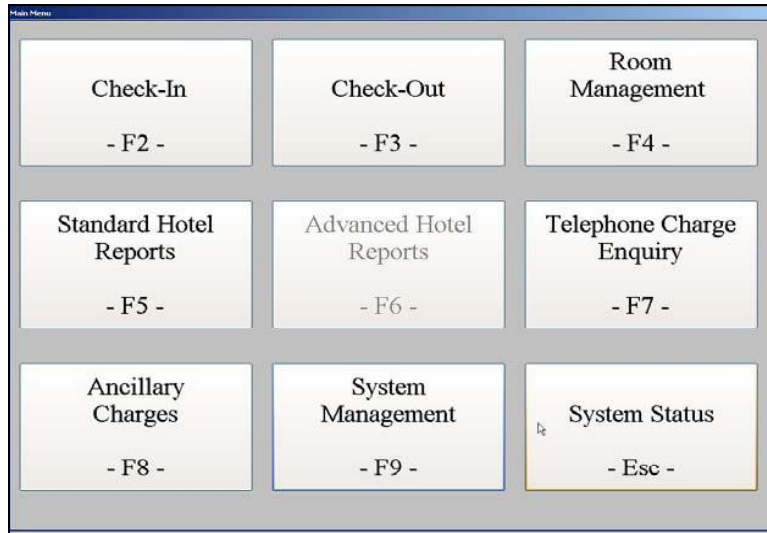


From the Room dropdown box select room 89101. Enter a descriptive name for the Guest Details **Name** field and then click on the **Check-In (F10)** button.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

22 of 24
TigerTMSHPIPO81

Using the **Interface to Avaya IPOffice** click on the **Communications** tab and verify that Tiger has passed the correct details onto the IP office.
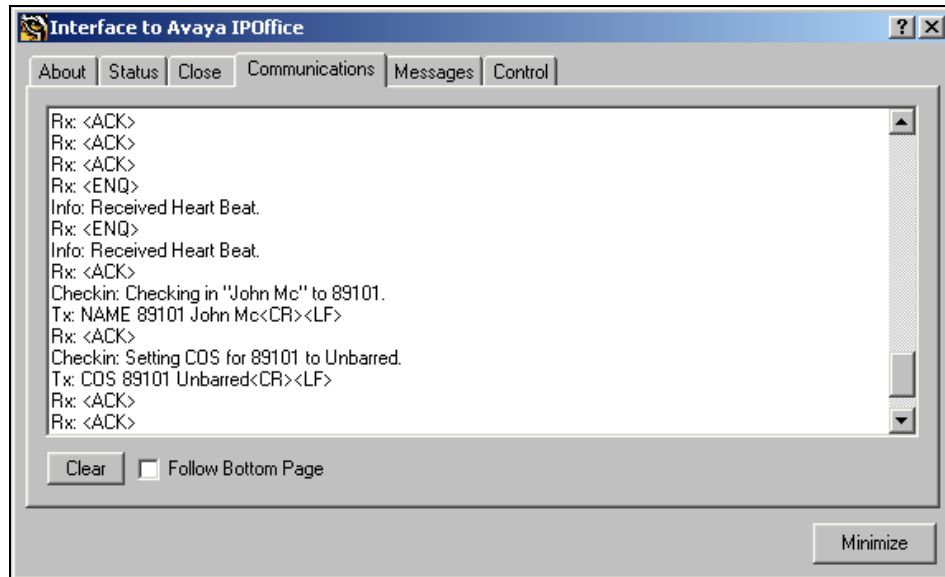


The station handset should now reflect the name entered in the check-in form.

# 8. Conclusion

A full and comprehensive set of feature and functional test cases were preformed during Compliance testing. TigerTMS Hotel Pro 50.0 is considered compliant with Avaya IP Office 8.1. 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.

[1] *Avaya IP Office R8.1 Manager 10.1, August 3rd 2012, Issue 29o, Document Number 15-601011*

Product Documentation for Tiger Communications products can be obtained at:
http://www.tigertms.com

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

23 of 24
TigerTMSHPIPO81

**©2013 Avaya Inc. All Rights Reserved.**
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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.

MC; Reviewed:
SPOC 5/1/2013

Solution & Interoperability Test Lab Application Notes
©2013 Avaya Inc. All Rights Reserved.

24 of 24
TigerTMSHPIPO81