Avaya Solution & Interoperability Test Lab

Application Notes for Tiger Communications Tiger Hotel Pro with Avaya IP Office 6.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Tiger Communication Tiger Hotel Pro to interoperate with Avaya IP Office 6.1. Tiger Communication Tiger Hotel Pro is the primary user interface for the Tiger Communication Tiger Hotel Pro hospitality package, where the staff can carry out their day-to-day tasks.

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.

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1. Introduction

These Application Notes describe the compliance-tested configuration using a Tiger Communications Tiger Hotel Pro and Avaya IP Office 6.1. Tiger Communication Tiger Hotel Pro is a graphical hospitality user interface. It is commonly used in hotels to provide a means of controlling usage of room facilities. Tiger utilizes XML based communication for hospitality control of Avaya IP Office. Hospitality features are translated into a set of XML commands, which are passed via a secure IP port on Avaya IP Office.

The following main features are provided by the Tiger 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.
- **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 the 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" through the Update facility, if the guest desires. On check-out, the user-rights are set to "Barred.
- **Message Waiting** - Tiger Communication 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.
- **Link Failure/Recovery** – Verification was done to ensure that there is suitable recovery of the Tiger Communication Tiger Hotel Pro after a lost connection to Avaya IP Office.

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The configuration in **Figure 1** was used to compliance test Tiger Communication Tiger Hotel Pro with Avaya IP Office. A TCP/IP link was established between Tiger Communications server and Avaya IP Office. From the Tiger Hotel 2020, XML commands were passed via a secure IP port on IP Office for replication of the hospitality features.

- E1 PRI Trunk card connected Avaya IP Office to another PBX, which was simulated a PSTN environment for testing outbound external calls.
- Avaya IP500 Office was configured with analog and digital expansion modules.
- Avaya 2420 digital telephones and Avaya 4620 SW and 4621 SW IP telephones were used to answer and/or place the calls.

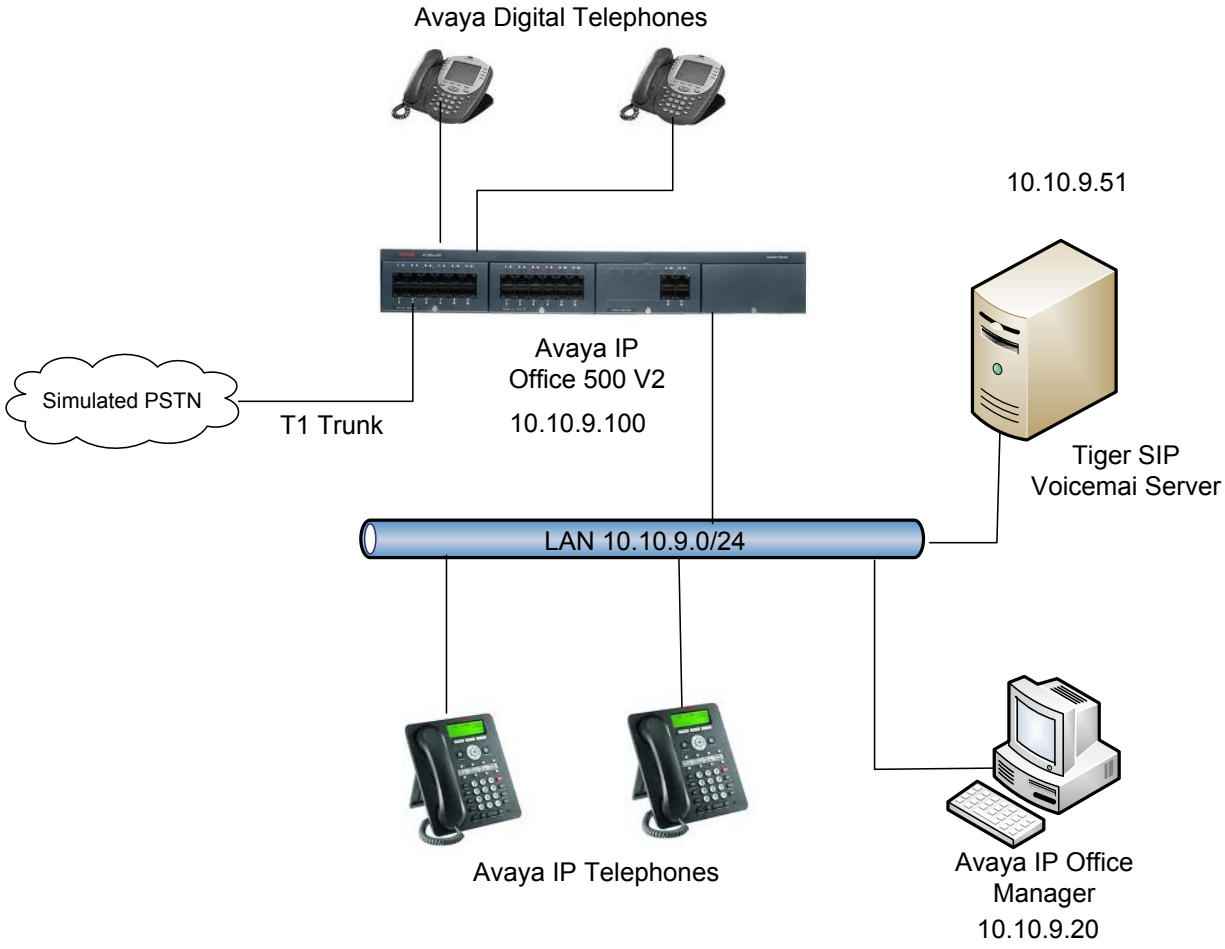

Figure 1 – Tiger Network Topology

Observations made during testing are noted below:

- Tiger sends names in reverse order to handsets: Tiger reverses first name and surname when sending them to IP Office.

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Table 1 lists the Extensions required for this testing. The information in the table will be referenced at different stages throughout these Application Notes.

Extension	Room Extensions
89100	IP Phone
89101	IP Phone
89102	IP Phone
89011	Digital Phone
89013	Digital Phone
Extension	**DDI Extensions**
89200	Sequential
89201	Sequential
89202	Sequential
89203	Sequential
Extension	**Room Status**
89020	Vacant Dirty
89021	Vacant Clean
89022	Vacant Inspected
89023	Occupied Dirty
89024	Occupied Clean
89025	Occupied Inspected

Table 1 – Extension list used Setup

1.1. Support

If technical support is required for the Tiger Communications Tiger Hotel Pro, contact their Technical Support Department.

Email: support@tigercomms.com

Phone: +44 1425 891 000

2. Equipment and Software Validated

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

Equipment	Software /Firmware
Avaya IP Office • 700417462 PRI Card • 700417330 DS1 Card	6.1(5)
Avaya IP Office Manager	8.1(5)
Avaya 9600-Series IP Telephones (9620, 9630)	3.1.1
Avaya 2420 Digital Telephones	-
Tiger Hotel Pro	4.9.9.2

Table 2: Equipment and Software Validated

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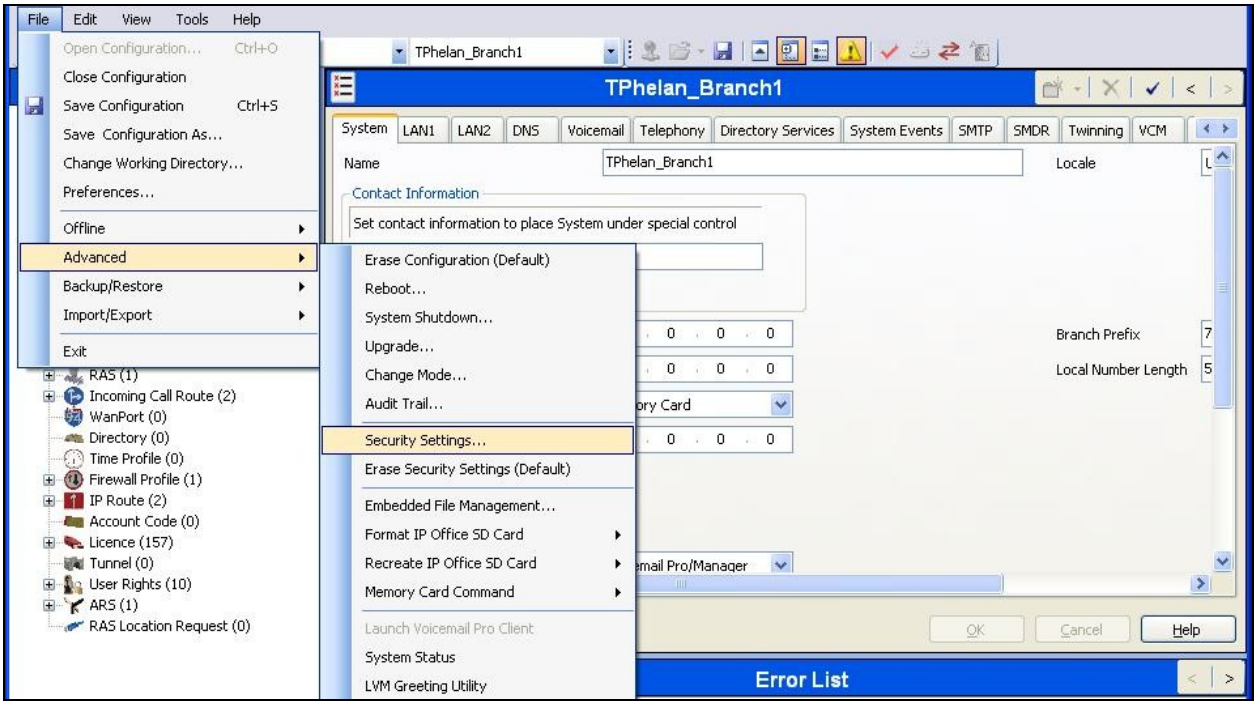
3. Configure Avaya IP Office

The configuration information provided in this section describes the steps required to set up IP Office for this solution. For all other provisioning information, such as IP Office installation and configuration, please refer to IP Office product documentation in reference **[1]**.

3.1. Configure Secure Connection

From the IP Office Manager PC, go to **Start→Programs→IP Office→Manager** and launch the Manager application. Log into IP Office Manager using the appropriate credentials. In the Manager window, select **File→Advanced→Security Settings…** to search for IP Office in the network.



Log into IP Office using the appropriate **Security Service User Login** credentials to receive its security settings. In the Security Settings General window that appears, click **Services** in the left pane. **Service Details** are displayed.

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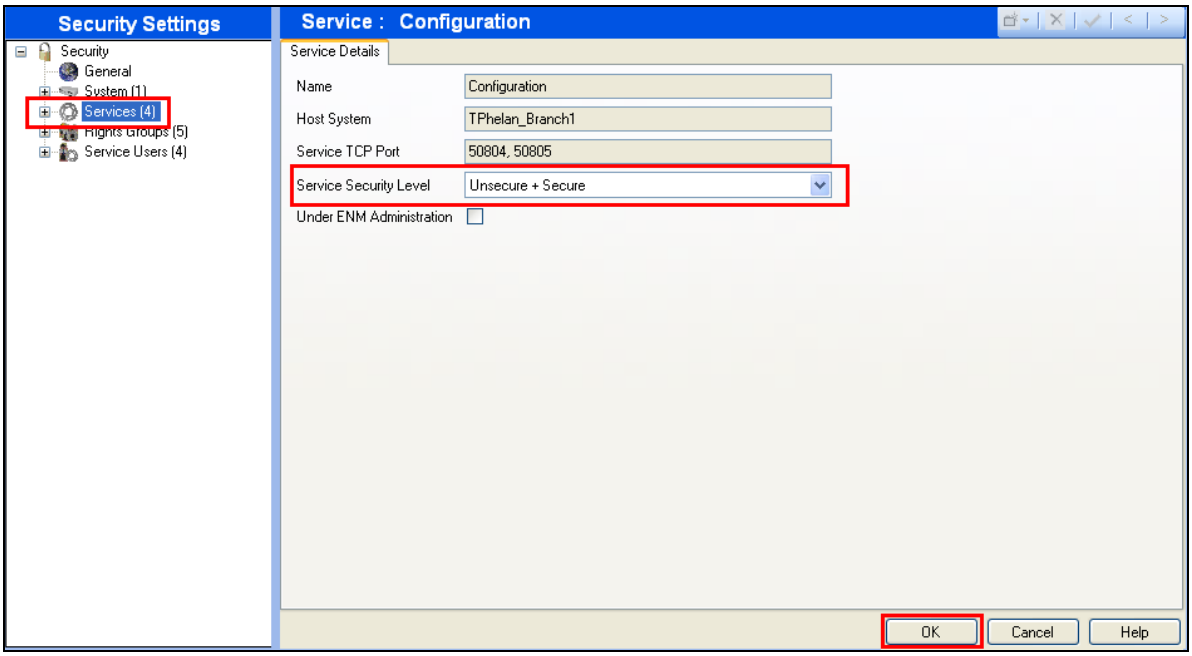
In the **Service Details** tab, from the drop-down list of the **Service Security Level,** select **Unsecure + Secure** and click **OK**.



In the Manager window, select **File→Save Security Settings** and re-enter username and password of the security administrator.

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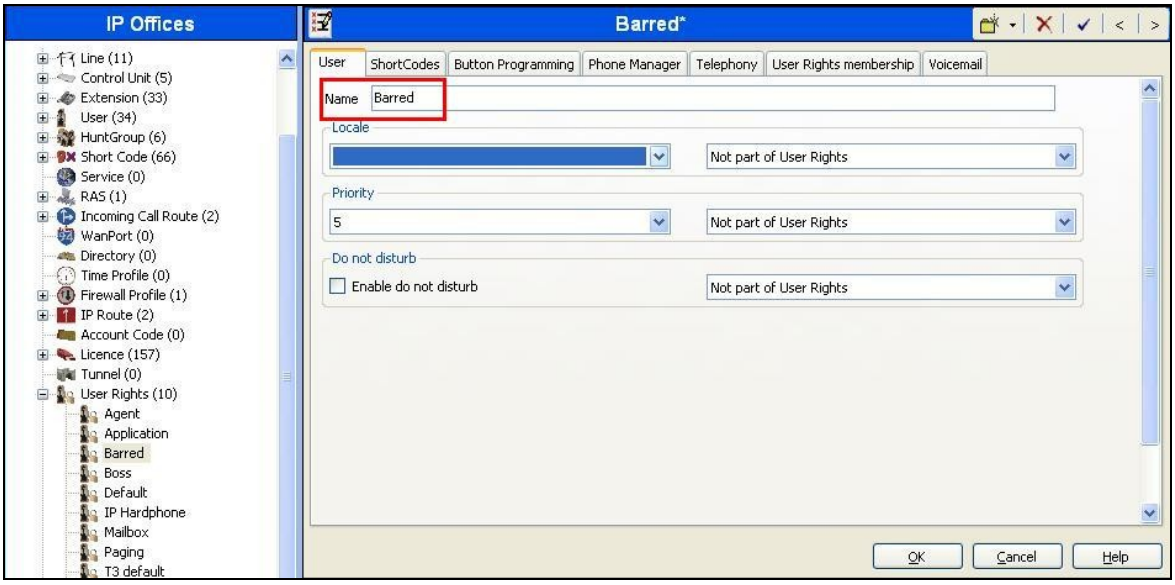
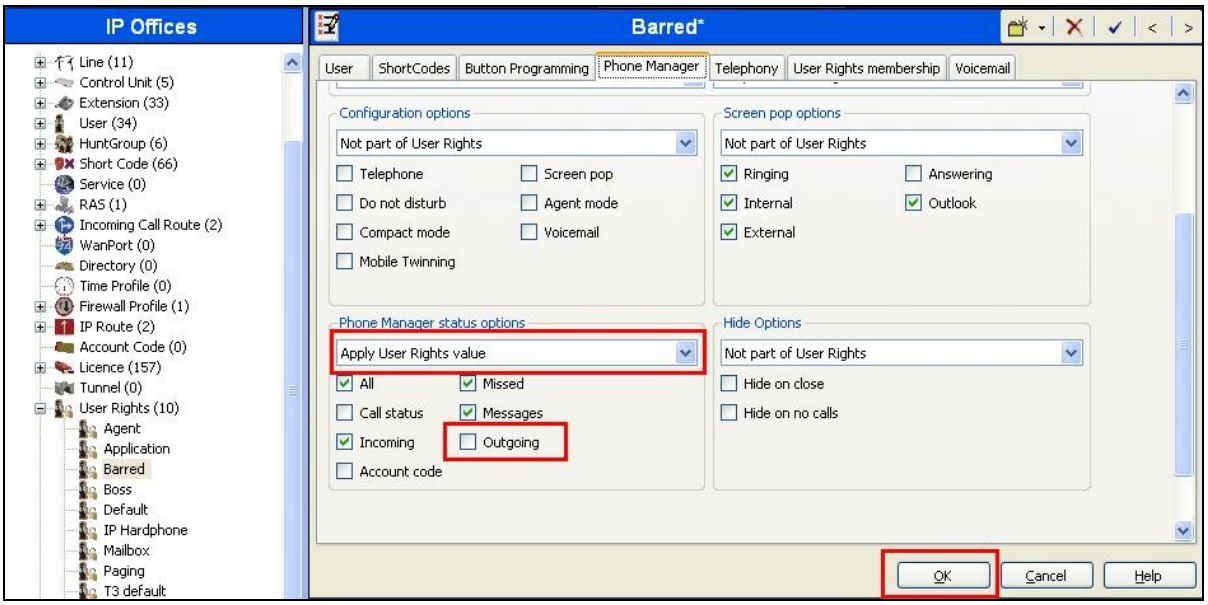
3.2. Modify User Rights

In the Manager window, expand Configuration Tree. Right-click on **User Rights,** and select the **New** option. The New User Rights window appears on the right-hand side. In the **Name** field, set value **Barred**.



Click on the **Phone Manager** tab. In **Phone Manager status options** section, uncheck the **Outgoing** checkbox and from the drop down list select **Apply User Rights value**. Click **OK**.



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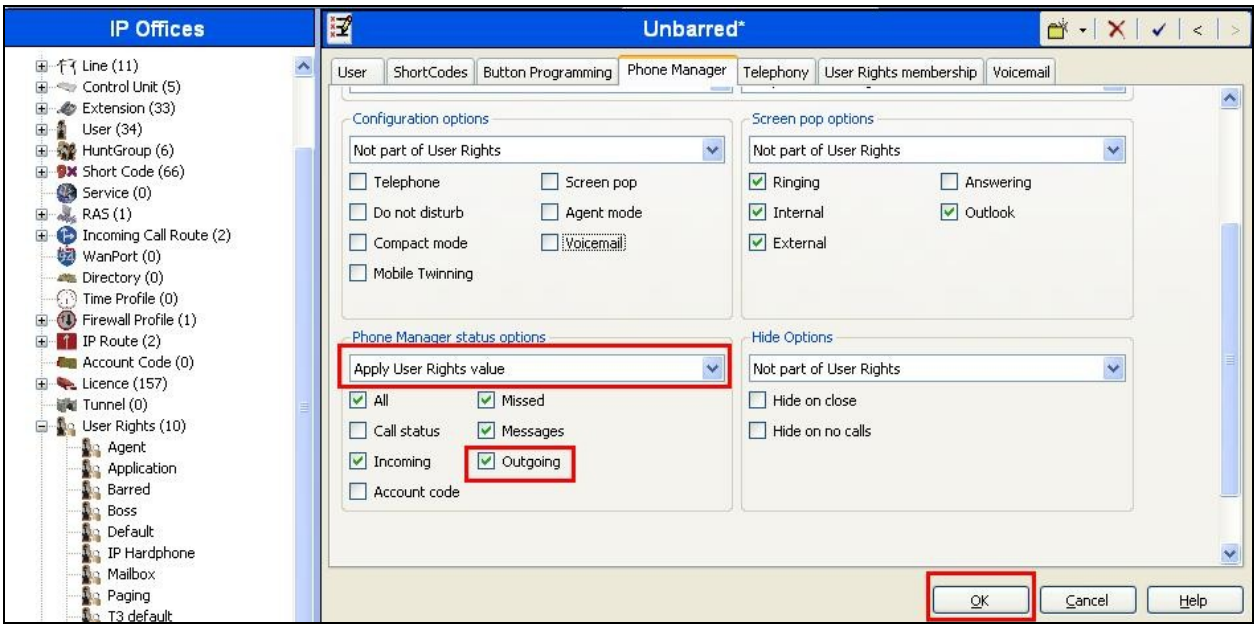
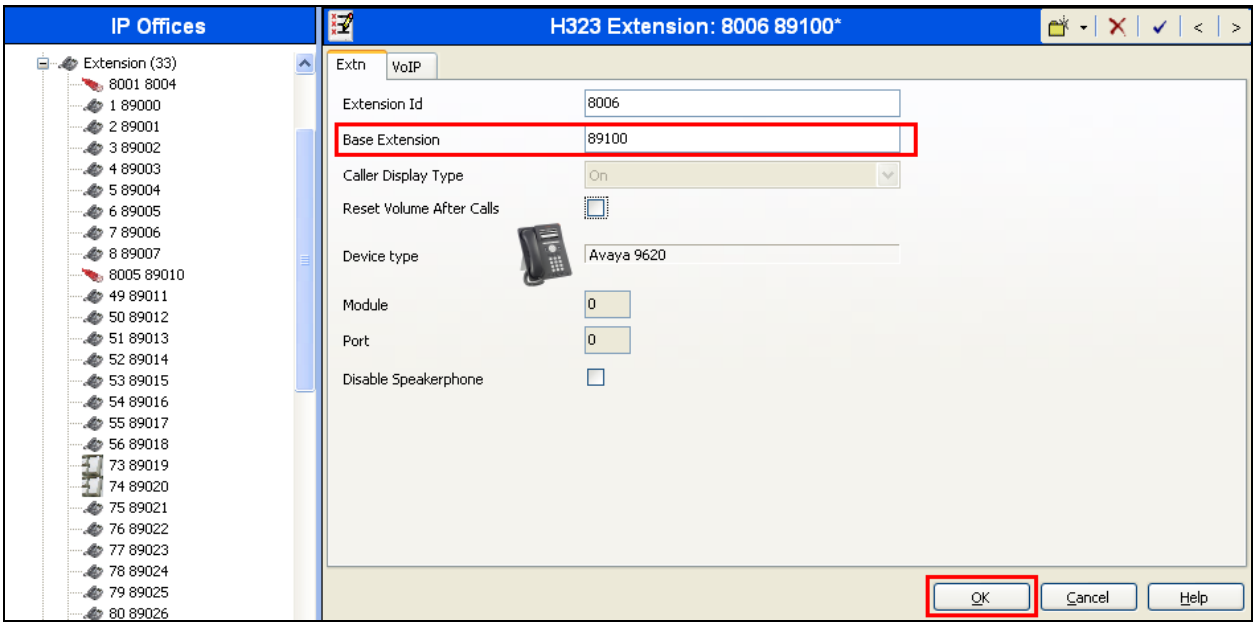
Create a second new **User Rights.** In the **Name** field set the value to **Unbarred** (Not shown). Click on the **Phone Manager** tab. In **Phone Manager status options** section, ensure the **Outgoing** checkbox is checked and select **Apply User Rights value** from the drop down list. Click **OK**.



3.3. Configure Users and Extensions

In the Manager window, go to the Configuration Tree, right-click **Extension** and select **New** in the pop-up menu that appears. In the subsequent Extension window, set **Base Extension** to **89100** which is the first extension in **Table 1.** Click **OK**.



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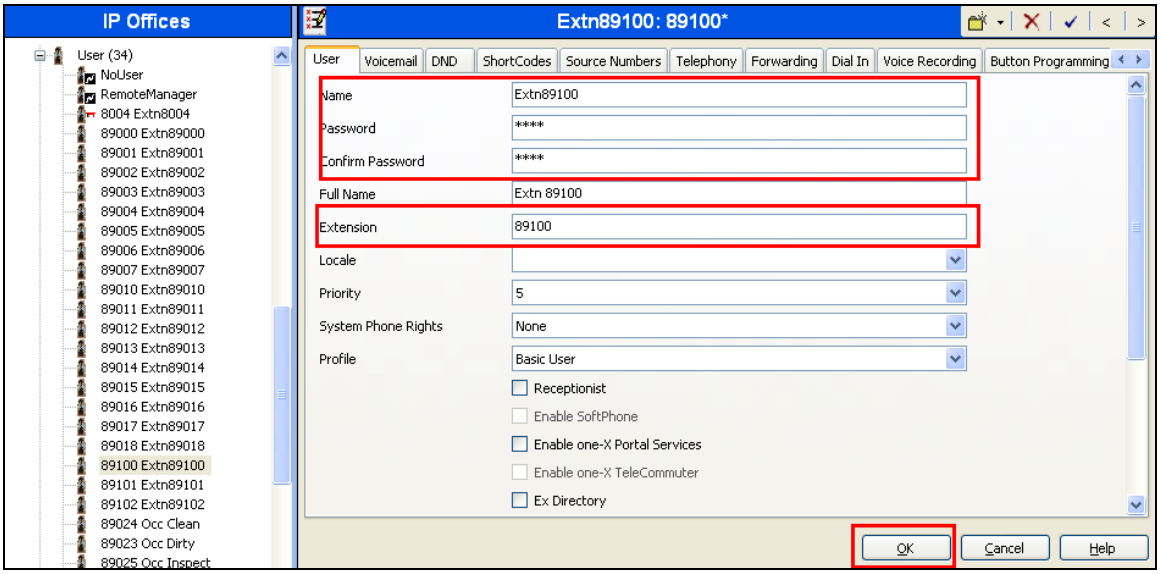
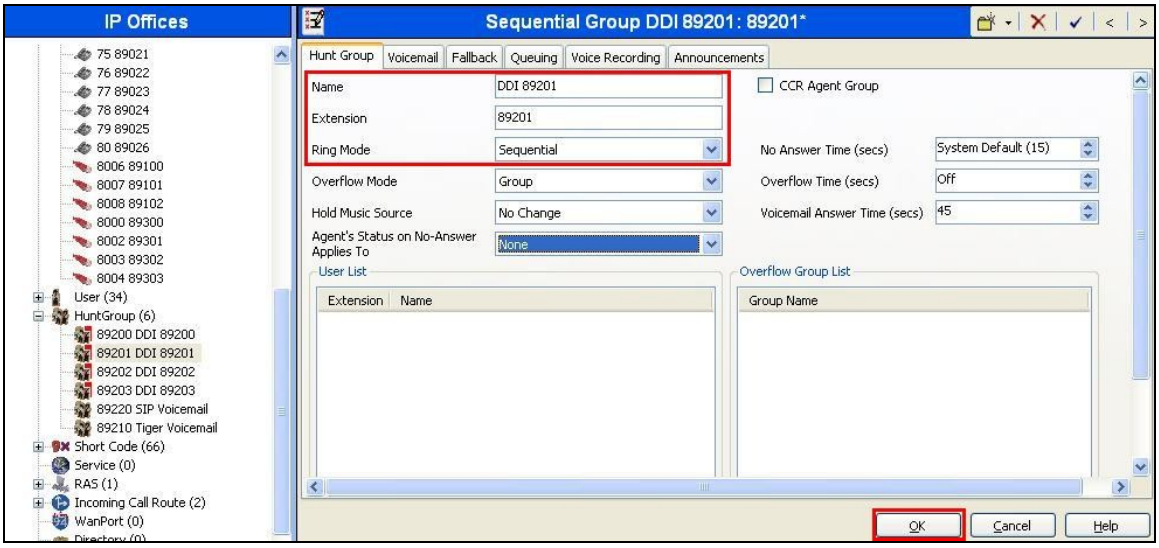
In the Manager window, go to the Configuration Tree, right-click **User** and select **New** in the popup that appears. In the subsequent User window, set an appropriate **Name, Password** and **Confirm Password**. Set **Extension** to **89100** from earlier in this section and click **OK**.



Repeat this for all room extensions that are required.

3.4. Create DDI Hunt Groups

In the Manager window, go to the Configuration Tree, right-click on **Hunt Group** and select **New** in the pop-up menu that appears. In the subsequent Hunt Group window, set **Name** to something appropriate, set **Extension** to **89201** and set the **Ring Mode** to **Sequential.** Ensure that no extension is added to the hunt group as they will be automatically added by Tiger Hotel Pro once a DDI is allocated to an extension. Click **OK**. Repeat this for each hunt group listed in **Table 1**.



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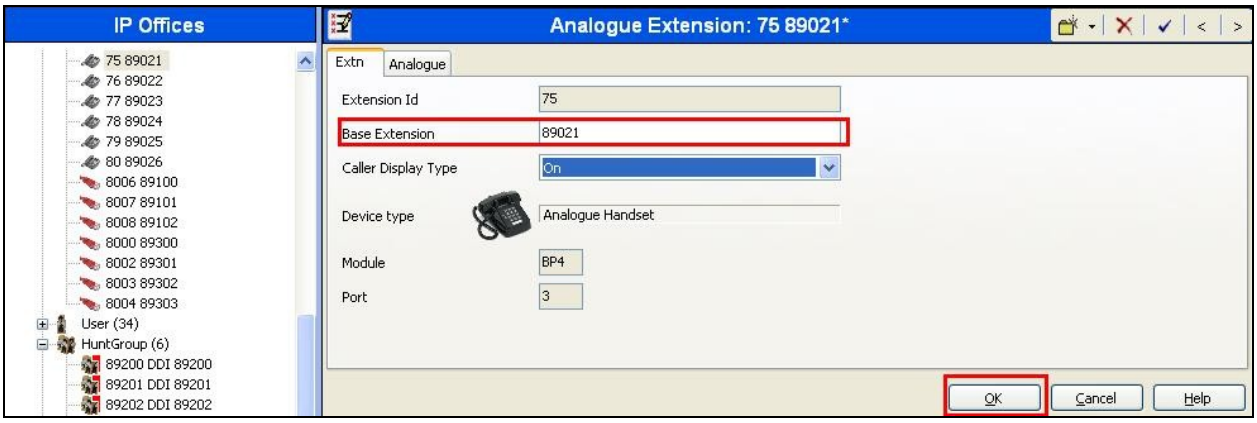
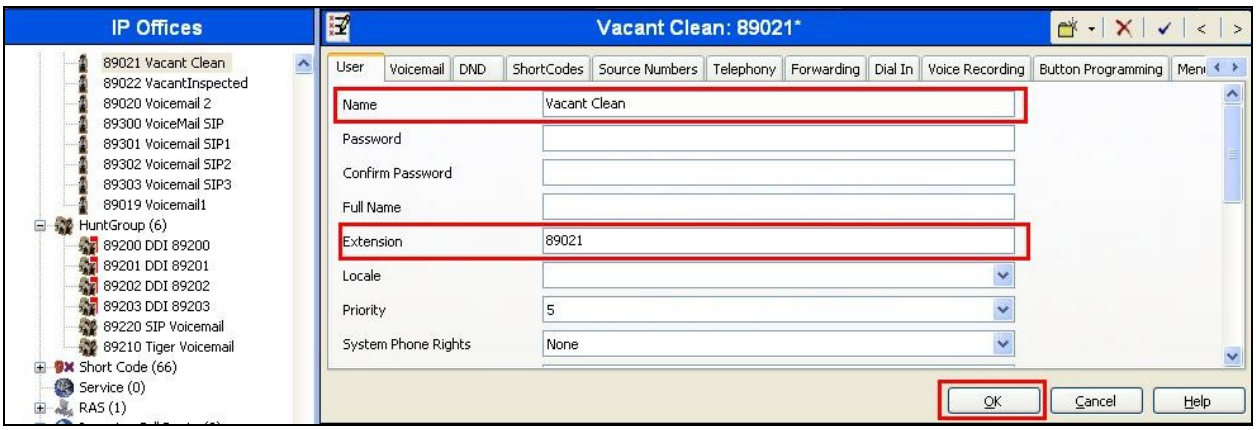
3.5. Create Room Status Extensions

In the Manager window, go to the Configuration Tree, and in the **Extension** area select one of the analog phones which are available by default when an IP Office Analog Card is present. Make a note of the selected analog extension and rename the **Base Extension** to **89021**, Details of extensions used for Room Status feature are located in **Table 1**. Click **OK**.



In the Manager window, go to the Configuration Tree, and in the **User** area select the User corresponding to the original analog extension that was renamed earlier. Rename the **Name** to **Vacant Clean** and ensure the **Extension** is set to **89021**. Click **OK**.



Repeat this step for each Maid Status required. Use the details of extensions specified for the Room Status feature in **Table 1**. In the IP Office Manager window, select **File→Save** to push the configuration to IP Office and wait for the system to update. This completes configuration of Avaya IP Office.

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4. Configure Tiger Communication Tiger Hotel Pro

The configuration information provided in this section describes the steps required to set up Tiger Hotel Pro to interoperate with IP Office 6.1. Tiger utilizes XML based communication for hospitality control of IP Office. Hospitality features are translated into a set of XML commands which are passed via a secure IP port on IP Office. For all other provisioning information, such as software installation, installations of optional components, and configuration of Tiger Hotel Pro, please refer to the Tiger Communications product documentation in reference **[3]**. It is assumed Tiger Hotel Pro is installed as described in reference **[3].** This section will discuss the IP Office changes required for this specific deployment.

4.1. Avaya Service Configuration File.

After installation and basic configuration, open the **AvayaService.INI** file located in the **<drive letter>:\tig2020\Avaya\Client**. The following values should be configured:

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

```
<?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="100" />
    <item key="logfilesizemb" value="10" />
  </section>
  <section name="avayaipoffice">
    <item key="serviceurl" value="http://localhost/AvayaIPOffice/service.svc" />
    <item key="serviceport" value="80" />
    <item key="ipofficeunitip" value="10.10.9.100" />
    <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>
```


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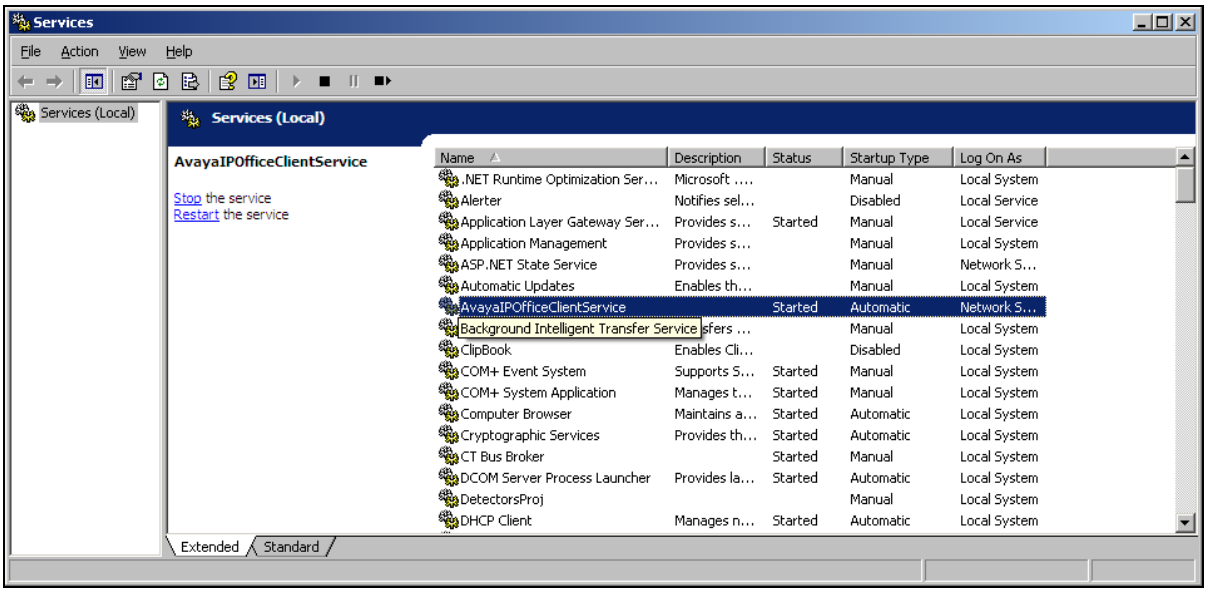
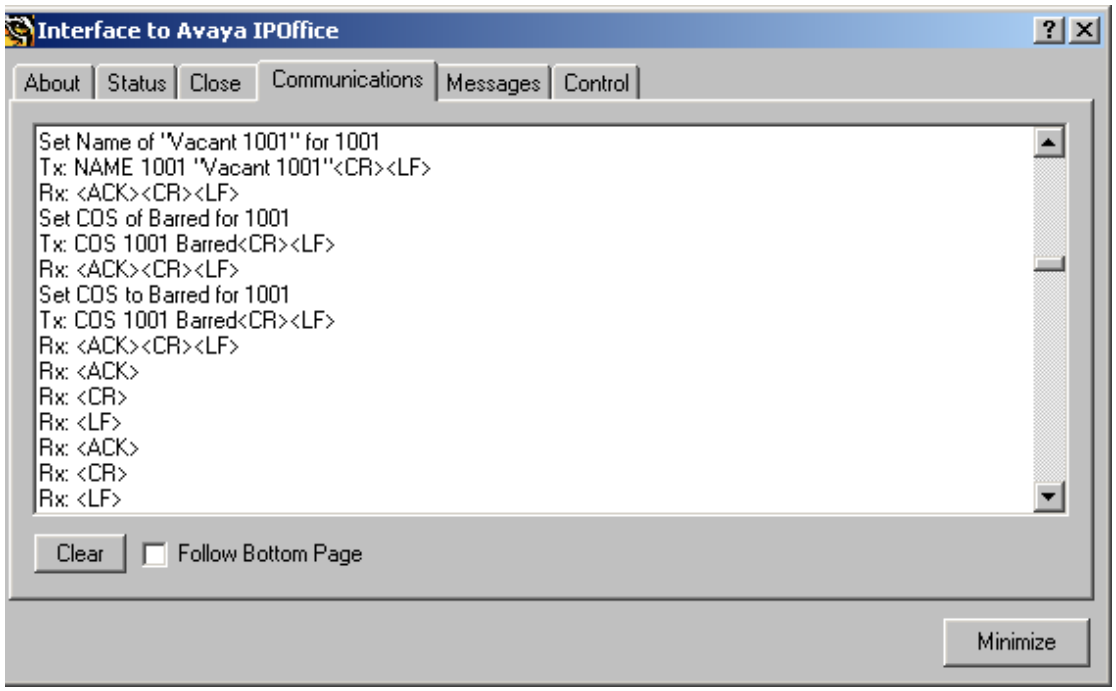
Open up the Services Management tool (services.msc) and set the **AvayaIPOfficeClientService** service to be Automatic and start the service.



4.2. Start Interface

On the Tiger server, run the batch file by clicking on **Start→Programs→Startup→Start Interfaces**. Once the batch file has been executed, the Interface to IP Office dialog box will be displayed. The interface shown below will display events that are passed from Tiger Hotel PRO to IP Office using the XML service.



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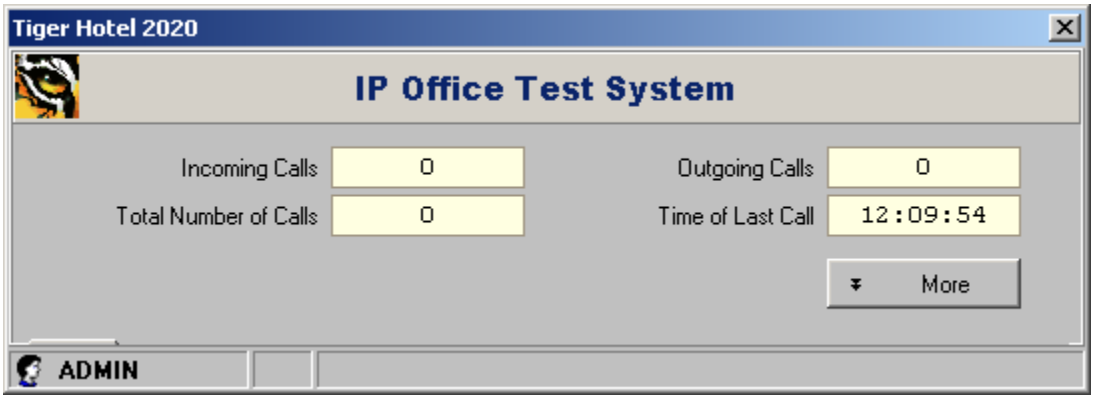
4.3. Create Guest Rooms

On the Tiger Hotel Pro server, click on **Start→Programs→Tiger 2020 Hotel Pro→Tiger Hotel 2020**. In the **Tiger Hotel 2020** screen that appears, click anywhere within this screen to launch the username and password dialog box (not shown), enter the appropriate user name and password to launch the Main Menu options screen.



In the Main Menu screen, click on **System Management (F9)** then **Directory Definition (F6)**.

Main Menu

System Management

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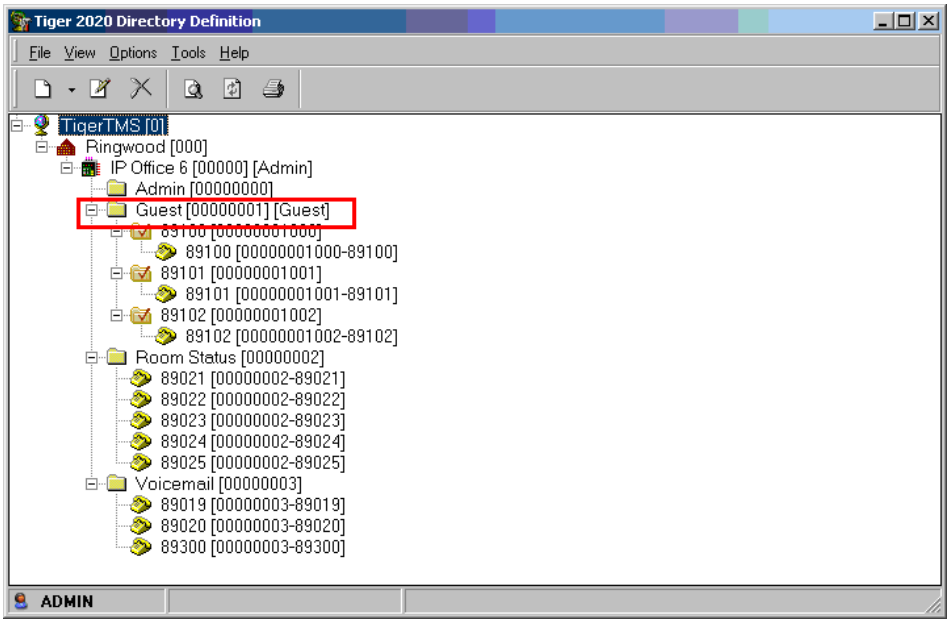
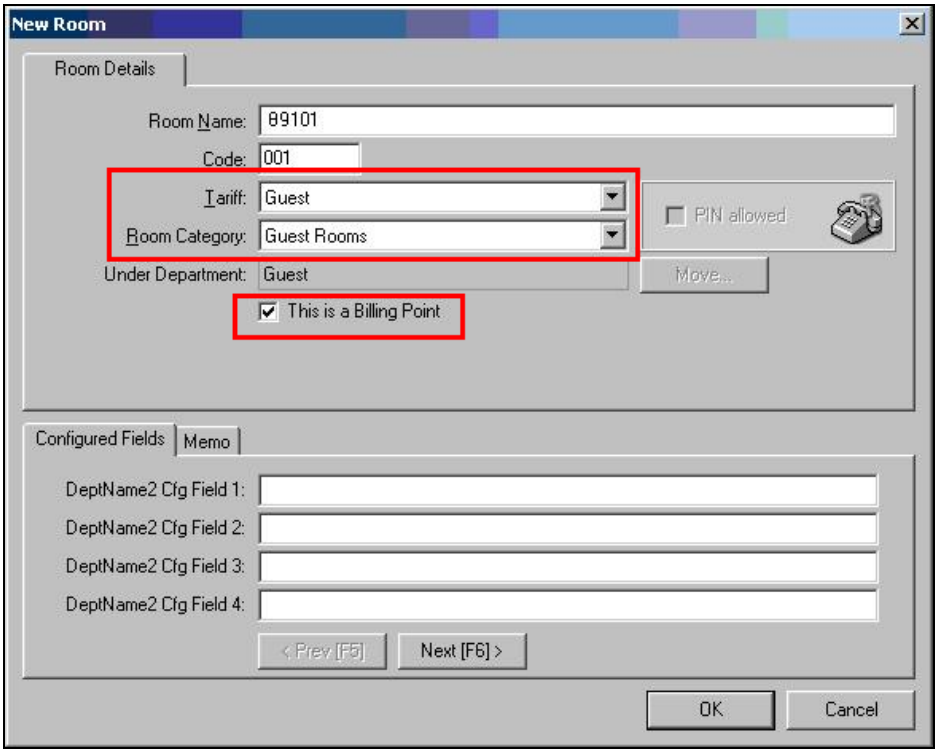
Expand the tree by clicking **TigerTMS→Ringwood→IP Office 6→Guest**.



Right-click on **Guest→New→Room** to open the screen shown below. Enter the room extension in the **Room Name** field. For the **Tariff** field select **Guest** and for the **Room Category** field select **Guest Room**. Tick the **This is a Billing Point** checkbox. Click **OK**.



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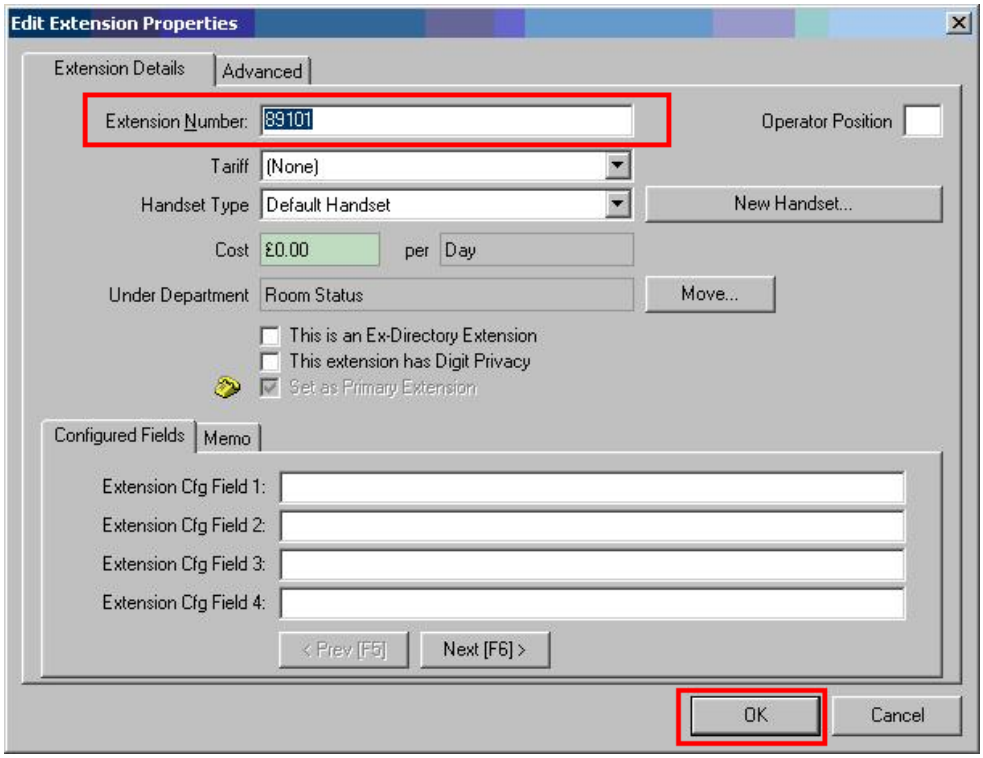
4.4. Create Extensions

In the Tiger 2020 Directory Definition screen, right-click on the new room created in the previous step and select **New→Extension** to assign an extension to the room. In the **Extension Number(s)** field, enter the extension number for the new room previously created. Click **OK**. Repeat for all room extensions.



4.5. Create Room Status Extensions

If not already created, create a new department for Maid Status called **Room Status**. The creation of a new department is documented in reference **[2].**

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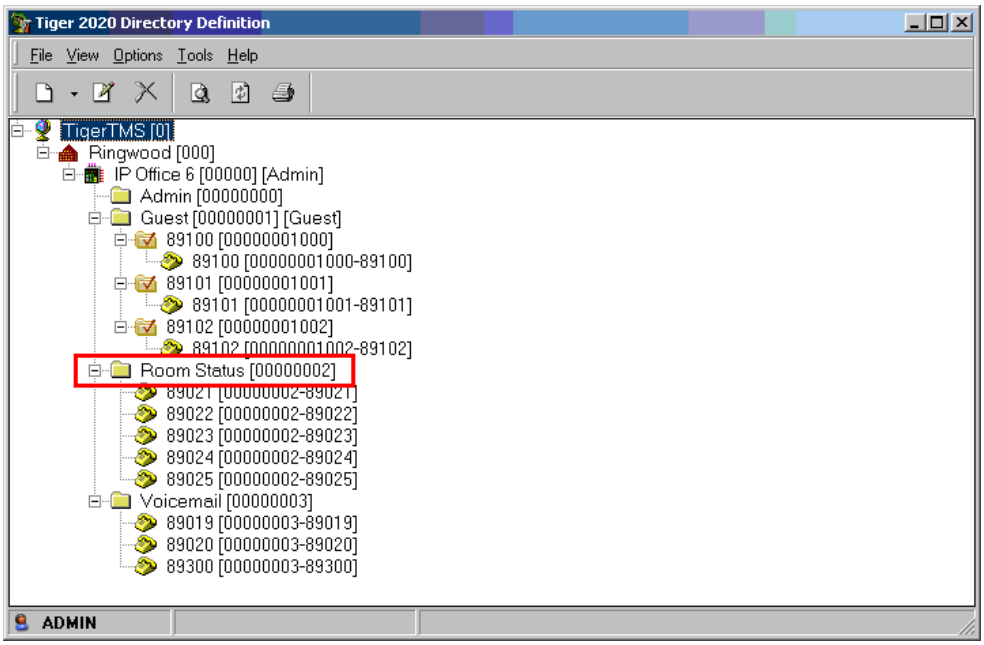
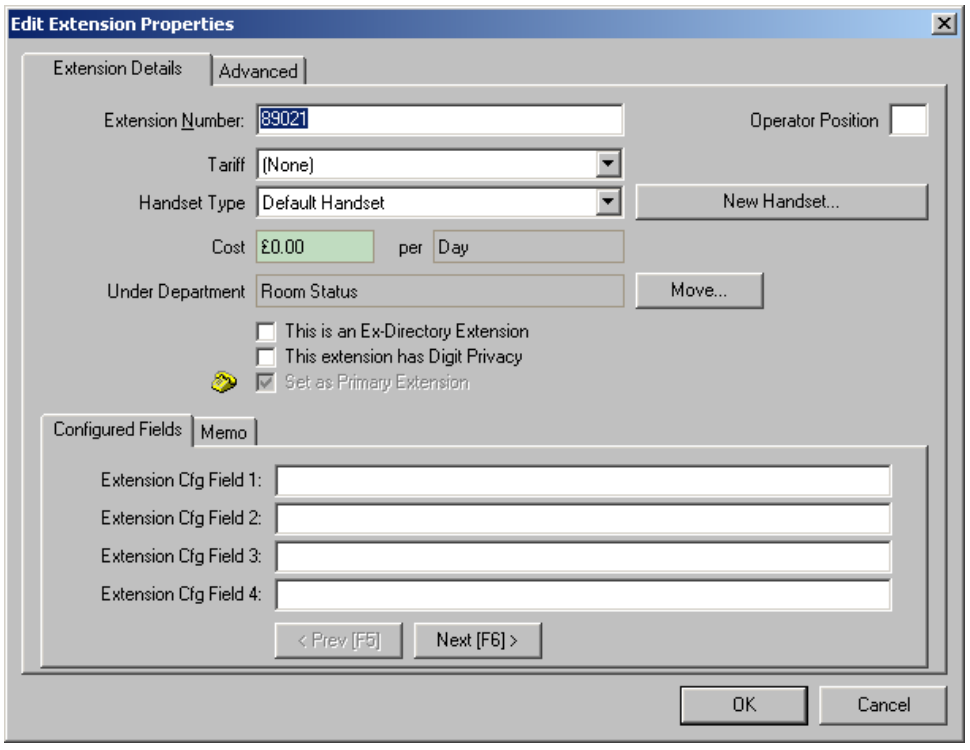
In the Tiger 2020 Directory Definition screen, right-click on the **Room Status** department and select **New→Extension** to create the new extensions for the Maid Status.



The extension numbers shown should reflect the Room Status numbers defined in **Table 1**. Repeat for all room status extensions.



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5. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing. The feature testing evaluated the ability of Tiger 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.

5.1. General Test Approach

The general test approach was to validate correct operation of typical hospitality functions including:

- Check-In
- DDI
- Update Name
- Room Transfer
- Telephone Service Class
- Message Waiting
- Check-out
- Room Status
- Link Failure/Recovery

Feature functionality testing was performed manually. The Tiger Hotel Pro interface was used to exercise hospitality features like check-in, check-out and room transfer. These activities would cause the following to occur: User's name in IP Office was updated with specified value or with room status, outbound external calls on an extension were barred/unbarred, Hunt Groups which were used for DDI allocation were updated with correct extensions. Internal and external calls were made by using digital and IP phones, and external inbound and outbound calls were made through T1/PRI trunk.

5.2. Test Results

All test cases that were executed have successfully passed.

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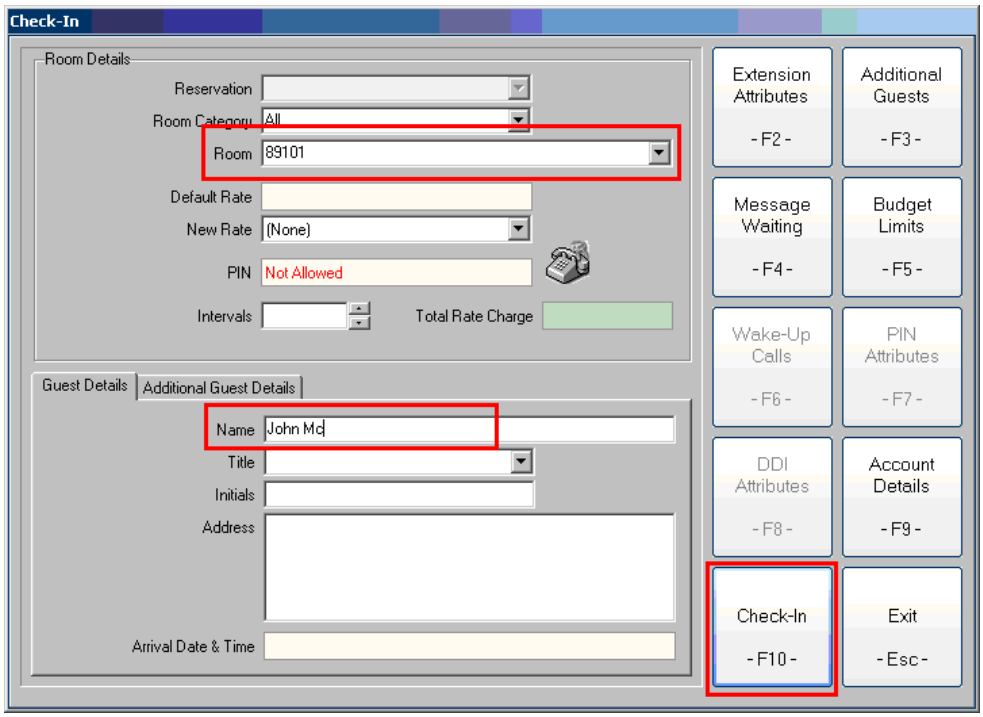
6. Verification Steps

Using the Tiger Hotel Pro Check-in hospitality function assign room 89101 with extension to 89101 to a guest. In the Main Menu screen, click on **Check-In (F2)**.

In **Room,** select a room 89101 from the drop-down list. Enter a descriptive name for the **Name** field in the **Guest Details** tab and then click on the **Check-In (F10)** button.



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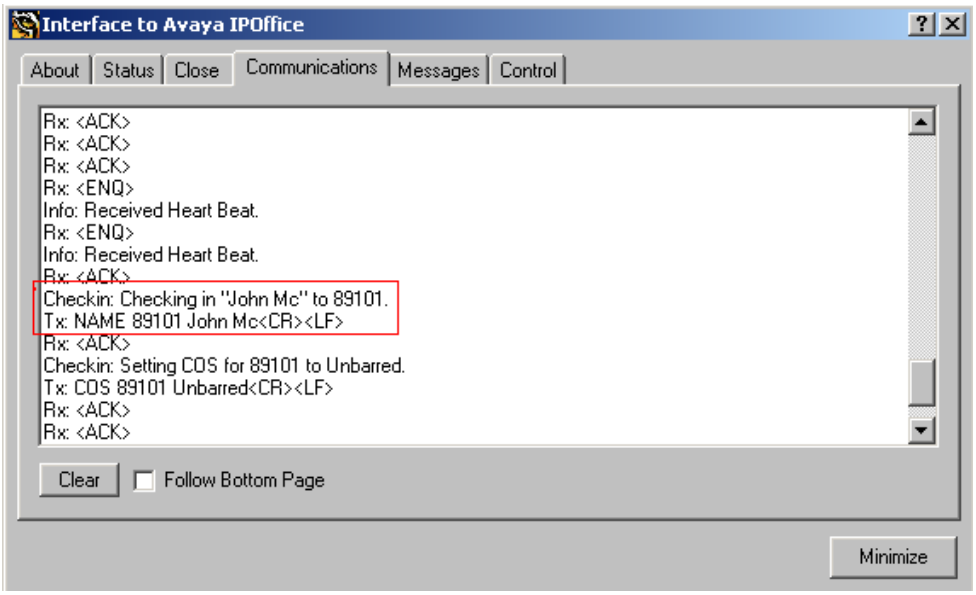
Verify that Tiger Hotel Pro has passed correct check in details to IP Office as shown below in **Interface to Avaya IP Office.** The station handset should now reflect the name entered in the check-in form.



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7. Conclusion

These Application Notes describe the required configuration steps for the Tiger Communication Hotel Pro to execute hospitality functions with Avaya IP Office. All test cases that were executed successfully passed. Tiger Communication Hotel Pro version 4.9.9.2 was successfully compliance tested with Avaya IP Office version 6.1(5). Observations made during testing are noted in **Section 1.0.**

8. Additional References

The following documentation may be obtained from http://support.avaya.com.

[1] *Avaya IP Office Release 6.1 Manager 8.1, Issue 25j, 3rd December 2010* available at http://support.avaya.com

[2] Product documentation for Tiger Communications products may be found at: www.tigercomms.com

[3] *TigerTMS Avaya IP Office Interface PMS Client Service* available at www.tigercomms.com

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