Integration Notes for the DuVoice Voicemail and Hospitality Features.

Introduction

This application note describes the steps required for integrating the DuVoice Messaging System with the IPitomy IP PBX. In an IPitomy / DuVoice integrated environment, the DuVoice system provides voicemail coverage for IPitomy PBX extensions and hospitality features such as clean room status, wake up calls, guest room name and phone restriction updates (check-in / check-out status). Guest room phones are assumed to be analog stations behind a SIP gateway, and configured both as extensions on the PBX and guest mailboxes in the DuVoice Mailbox Administration application.

For voicemail integration, the PBX is configured to use an external voicemail as the 'default voicemail service'. A SIP port configured on the DuVoice system is registered to the PBX as an extension and defined as the default voicemail gateway. Hospitality integration is achieved via the DuVoice HTTP Name Service Connector integrating with the PBX as an external application.

This note applies to the voicemail and hospitality integration only. Refer to the IPitomy IP PBX Administration guide at http://wiki.ipitomy.com and the DuVoice System Reference Guide at http://manual.duvoice.com for general installation and configuration instructions.

Configuring the PBX

It is recommended that you configure the PBX system settings and have the DuVoice Messaging System software installed before you continue. These steps can then be performed by logging in from a browser on your DuVoice system. This will allow you to copy and paste required information between systems such as SIP passwords, application authorization information and Class of Service names.

Creating PBX Extensions:

From Destinations menu, select the Extensions page.
Create extensions for each guest room phone. Note that the name field for guest extensions will be overwritten by the VM system, so there is no need to fill in a name for these extensions. Also note of the extensions and SIP passwords. This will be used for configuring the Gateway.

Create extensions for all other phones on the PBX. Finally, create an extension for the VM System Port. This extension will be used to route callers to the VM system (external vm gateway). Take note of the extension number and SIP password. This will be needed to configure the VM system SIP Port.

Refer to http://wiki.ipitomy.com/wiki/IP_PBX_Manual_Extensions for more information on creating and configuring PBX extensions.

Configure External Voicemail:

From PBX Setup menu, select the Voicemail page.
Scroll down to the External Voicemail Settings as shown below.
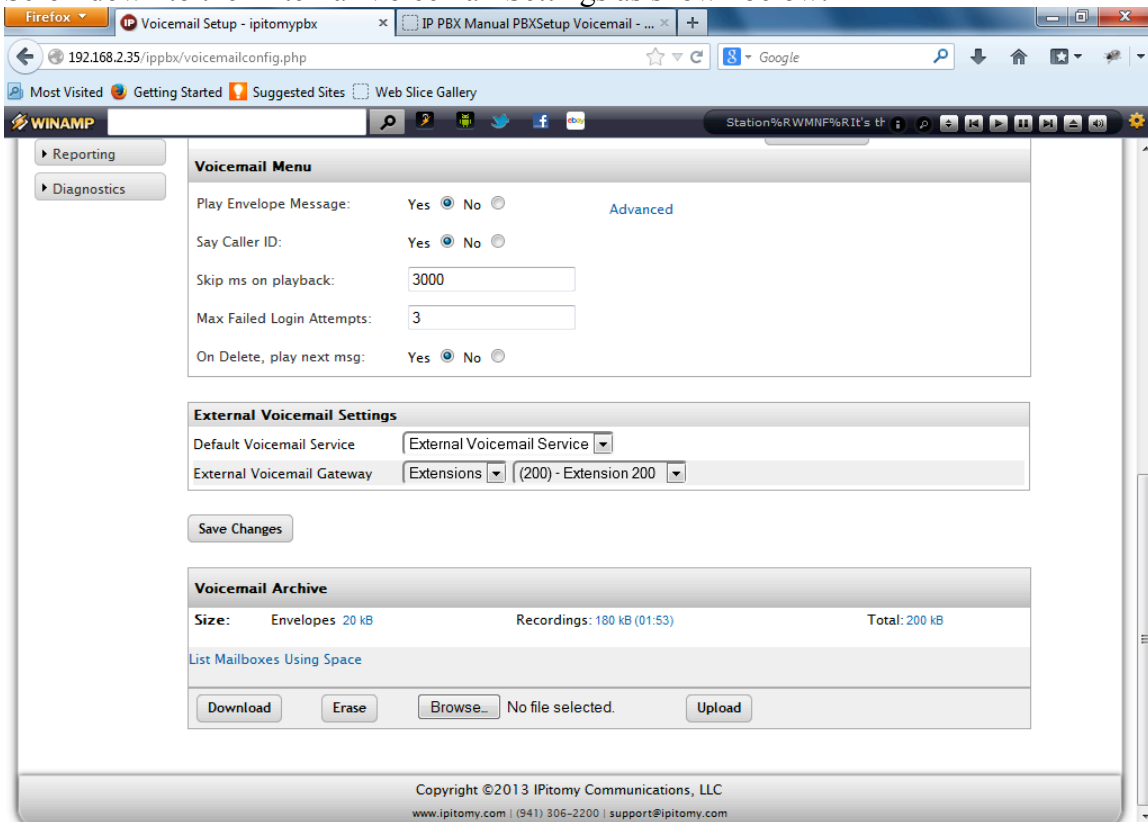
From the Default Voicemail Service dropdown, select 'External Voicemail Service'.

For the External Voicemail Gateway, select the extension you created above for the VM System Port.

Note if External Voicemail Settings are not visible on this page, the system may not be properly licensed for this integration.

Create Class of Service Entries for Checked-in and Checked-out Guest Room Status.

From the Call Routing menu, select Class of Service.
Create a Class of Service for the Checked-In Guest status.
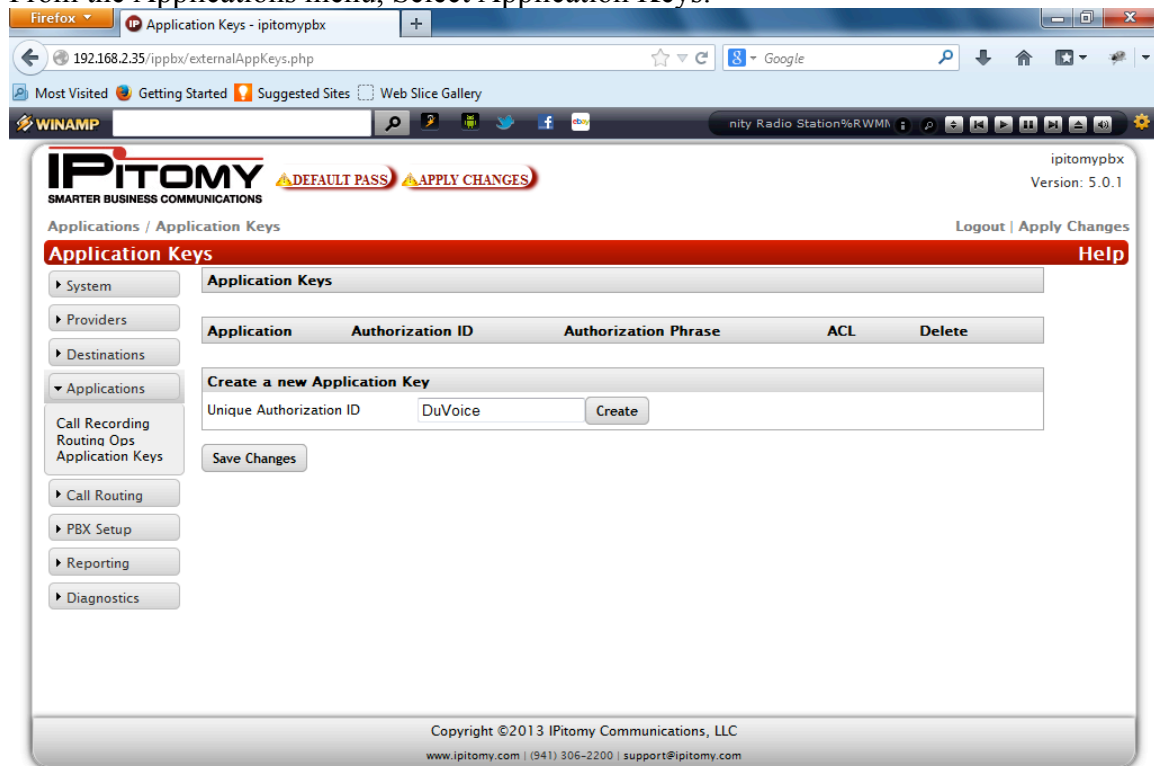Assign all applicable outbound routes for checked in guests.

Create a Class of Service for the Checked-Out room status. Only add routes you wish to allow for the checked out room status. You may want to add the Emergency route to the checked out room status to allow 911 calls.

Refer to http://wiki.ipitomy.com/wiki/IPPBX_IMM_SystemAdminCallRouting for more information on configuring Call Routing and creating Class of Service entries.

## Generate an External Application Key for the Hospitality Integration:

In order for external applications to communicate and effect changes on the IPitomy PBX, the application must have a valid authorization key. The authorization id and key pair generated here will be used to integrate the hospitality system.

From the Applications menu, Select Application Keys.

Enter a name to use for the Unique Authorization ID and click the Create button. In the above example, the ID name entered is DuVoice. This will generate a unique Authorization Phrase for the ID DuVoice on this system. Note that the ID name is case sensitive and duplicate ID names are not allowed.
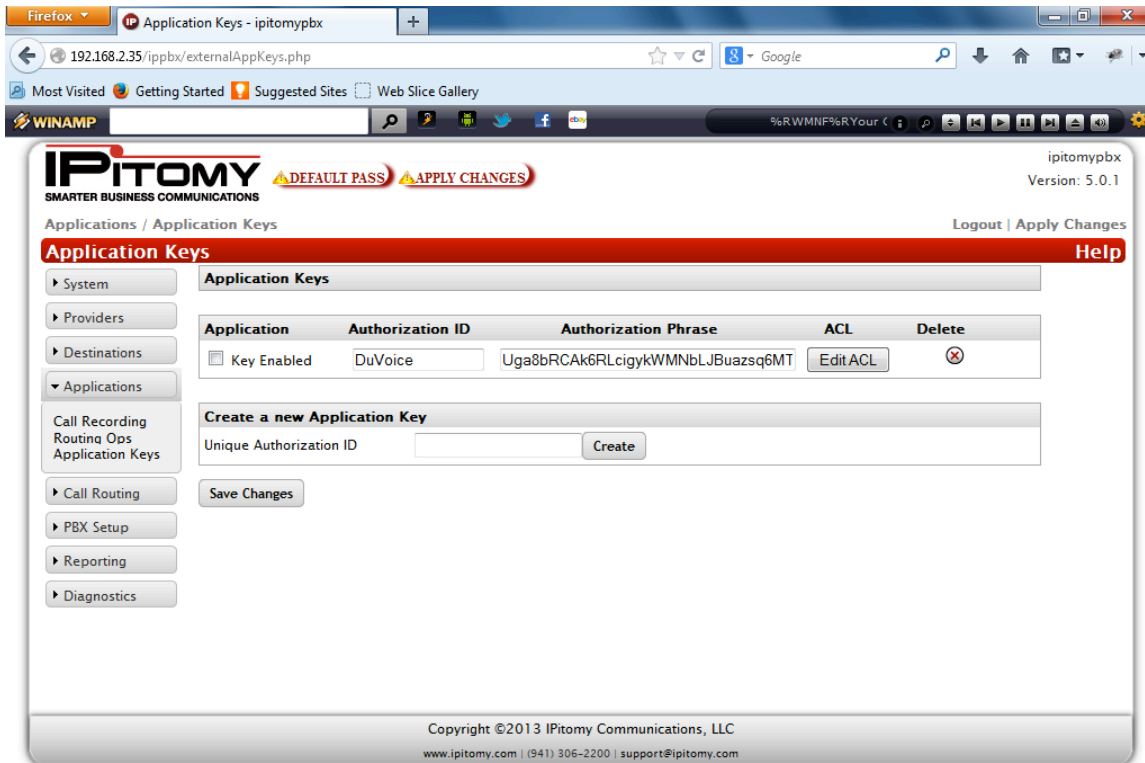
Be sure to check the Key Enabled box to enable this key. Requests to a disabled key will be rejected and the hospitality integration will fail.

Each generated ID/Key pair has its own Access Control List (ACL). This option is for advanced users and should initially be left at the default.

Save your changes.

For more information on Access Control Lists, refer to
http://wiki.ipitomy.com/wiki/IPPBX_IMM_AdminSystemNetworking

Configuring the DuVoice System for PBX Integration.

It is recommended that you have already configured the PBX and can access the PBX Admin via a web browser from the DuVoice system. This will allow you to copy and paste required information between systems such as SIP passwords, application authorization information and Class of Service names.

Voicemail Integration:

Open the DuVoice Activity Monitor application and select Service/Stop from the main menu.

Open the DuVoice System Configuration application and from the main menu select Define Ports/ Voice Ports / Define a Voice Port.

Select the Port Configuration Tab.

Enter the extension number assigned in the PBX as the Voicemail Gateway
Enter a hunt group extension number (this is not used by the PBX, enter any non-extension number)
Select SIP_ASTERISK as the PBX integration template file.
Leave the rest of the fields at default.

Select the SIP Configuration Tab

Enter DuVoice as the User agent.

Enter the PBX extension number created for the external VM gateway as the Account name.

Enter the SIP Password for the extension as the password. If you have the PBX Admin open in a browser, edit the external VM gateway extension and click the advanced button. Copy and paste the SIP password from PBX Admin into the Password field.

Enter asterisk as the Realm.
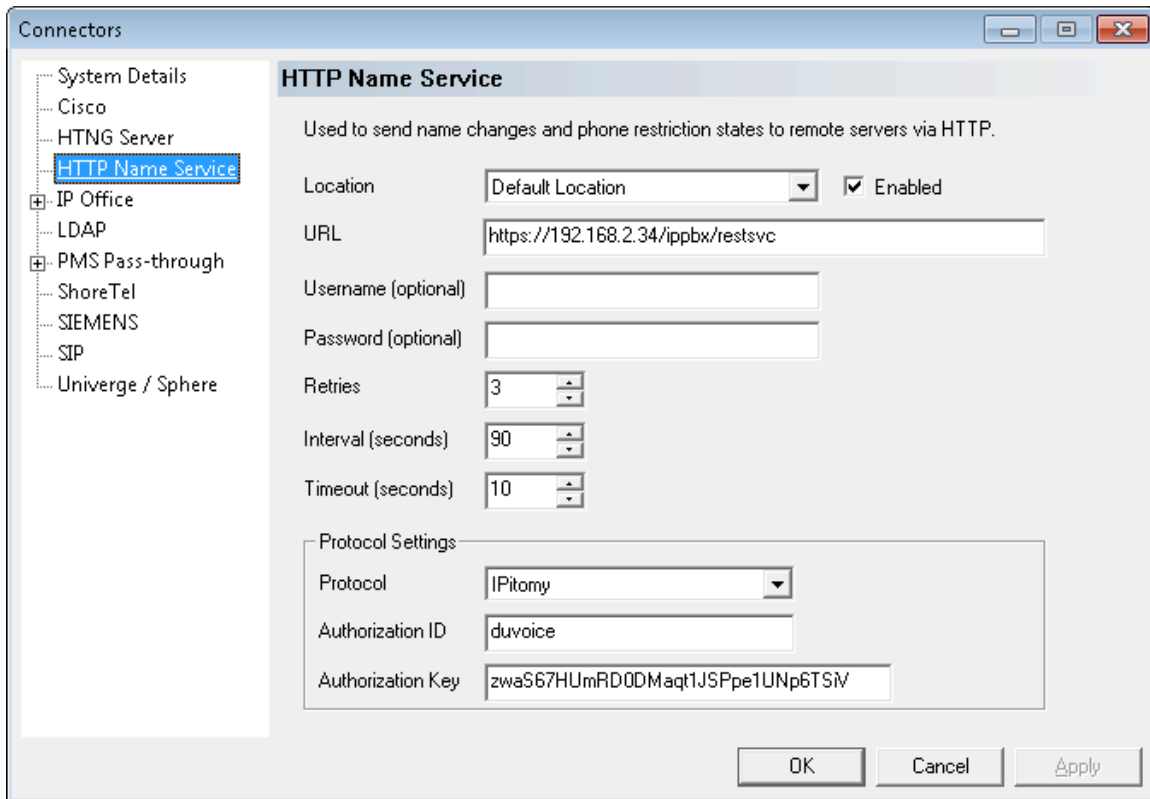
Check the Enable Register box.

Select the SIP Tab

Enter the IP Address of the PBX into the Server Address field.

Select Apply to save your setting.

Hospitality Integration:

From the main menu, select Features / Connectors….
Select HTTP Name Server.

Enter the URL of the ippbx application server. The URL should be as follows: https://<pbx ip address>/ippbx/restsvc where < pbx ip address > is the address of the IP PBX. In the above example, the pbx ip address is 192.168.2.34 so the full URL is https://192.168.2.34/ippbx/restsvc

Set the Timeout to at least 10 seconds as shown above.

Enter IPitomy for the protocol
.
Open PBX Admin from your browser and select Applications/Application Keys. Copy and paste the corresponding values from PBX Admin into the fields below.
Enter or paste the value from the Application Key field Authorization ID into the Authorization ID field.
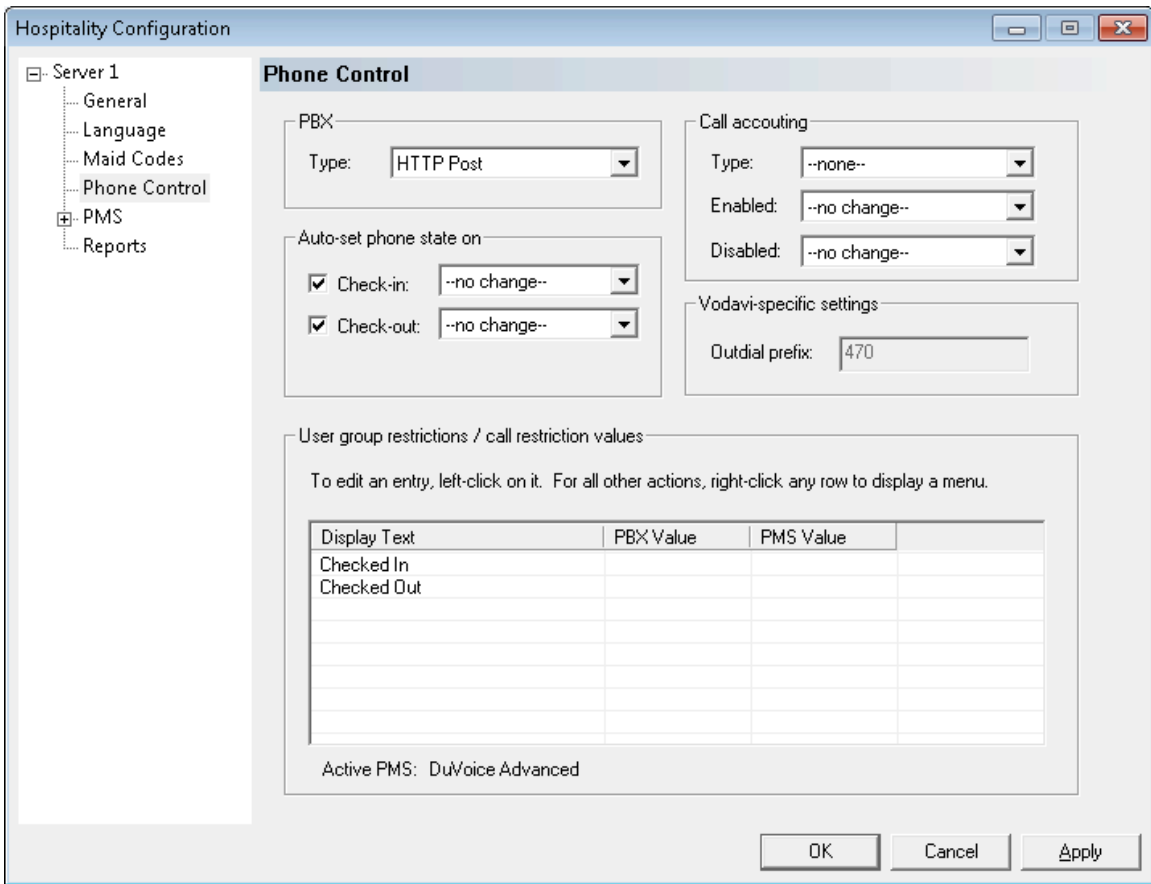Enter or paste the value from the Application Key field Authorization Phrase into the Authorization Key field.
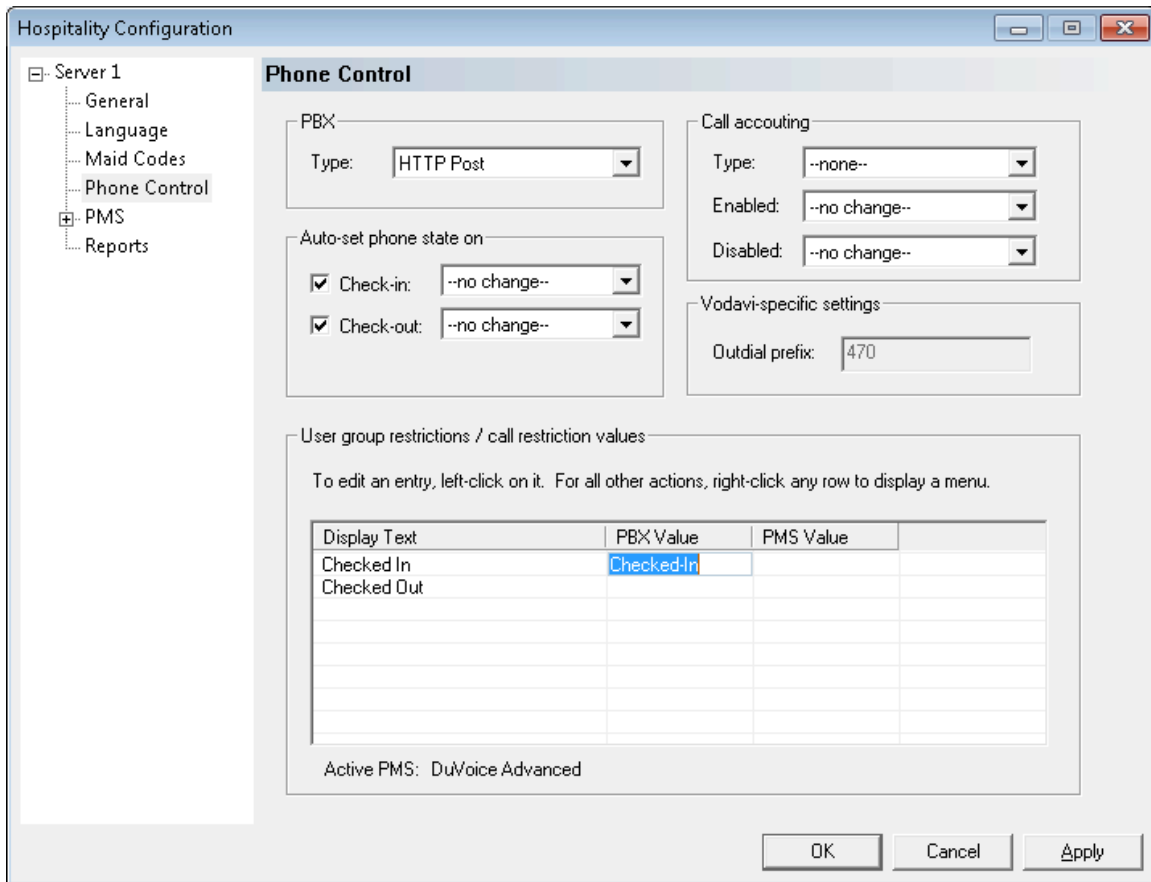Click OK

From the Main Menu, select Features / Hospitality…
Select Phone Control

In the PBX Type Dropdown, Select HTTP Post.
Left Click on the PBX Value field for the Checked in row as shown below.

Enter the Class of Service name you created in the PBX for the checked in room status. Left Click on the PBX Value field for the Checked Out row. Enter the Class of Service name you created in the PBX for the checked out room status.
Click the apply button.

Go back to the 'Auto-set phone state on' group and select the values you just entered from the drop down list as shown.
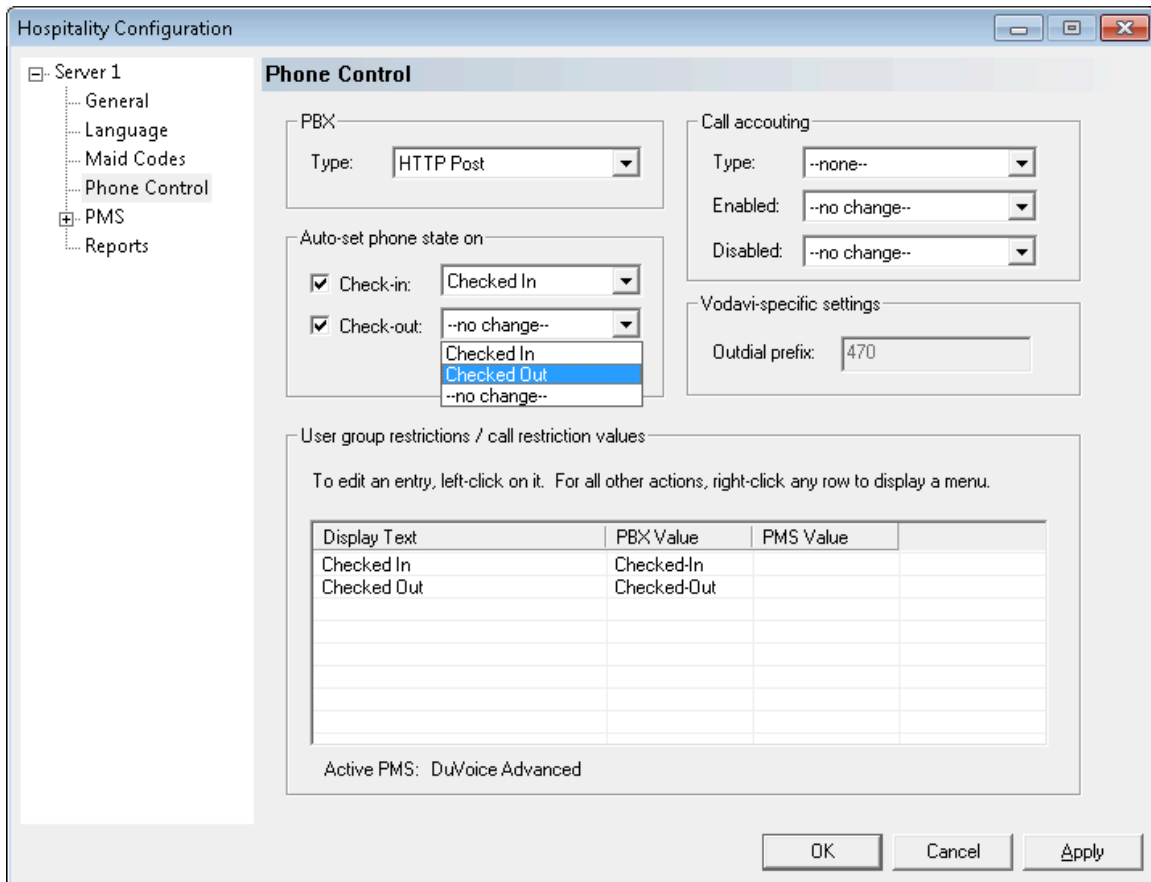
Be sure the selections match the names in the PBX and the check boxes are enabled.
Click OK

Go back into the DuVoice Activity Monitor application and select Service/Start from the
Main Menu to restart all services.