



Hosted Voice Service Enterprise Administrator Guide

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1 Introduction

1.1 Purpose of this guide

Welcome to your new phone system!

This guide is intended to help Administrators of a Metaswitch Hosted PBX phone system perform the various tasks needed to administer the system, such as

- Adding new lines to the system
- Setting up your call groups
- Configuring your automated receptionist.

It is split into sections which describe how to configure a different aspect of your phone system.

There is a glossary at the end of this guide which explains the important concepts your phone system uses.

1.2 Other guides

There are other guides which you may need to refer to when administering your phone system, and you will need to provide to the users of your phone system. These are:

- *Metaswitch Hosted PBX End User Quick References*. These are two page quick reference cards which describe the basic features of your new phones. You should distribute these Quick References to all of your end users.
- *Metaswitch Hosted PBX End User Guide*. This guide describes how end users should use all of the functions and features of your phone system. You should distribute copies of this document to all of your end users.

If you are deploying the CommPortal Communicator Desktop soft phone, you should refer to the following guides.

- *CommPortal Communicator Desktop Administrator Guide*. This guide describes the tasks that you may need to carry out to ensure that the softphone client and your network are configured correctly.
- *CommPortal Communicator Desktop End User Guide*. This guide describes how end users can download and use the CommPortal Communicator Desktop soft phone. You should distribute copies of this document to all of your end users.

2 CommPortal Business Group Administrator (BG Admin)

CommPortal provides a web interface to your phone system, and allows end users and Business Administrators to modify their settings. There are two CommPortal interfaces.

1. The first is for regular users to manage their business telephony settings.
2. The second is for Business Group Administrators to modify both global settings for the business and to modify end-users' settings.

The second of these interfaces is the one which you will use to administer the phone system and is described by this document. For more details on using the first interface, please see the *Metaswitch Hosted PBX End User Guide*.

2.1 Accessing CommPortal BG Admin

To configure BG lines, and to manage their BG's lines and services, a BG Administrator should log in using a separate login page to regular users. For example, if BG Line Users log in at <http://www.example.com/business>, a BG Administrator might log in at <http://www.example.com/business/bg>. The BG Administrator login page sends the BG Administrator to the BG Administrator section of the default web UI.

CommPortal is supported on the latest versions of all major browsers and operating systems. This includes:

- Microsoft Internet Explorer version 6 or later (IE 8 is required for some functions)
- Firefox version 3 or later
- Google Chrome version 4 or later (Windows only)
- Safari version 5 or later (Mac OS X only)
- It is supported on the following operating systems:
 - Microsoft Windows 2000
 - Microsoft Windows XP
 - Microsoft Windows Vista
 - Microsoft Windows 7
 - Mac OS X 10.6, Snow Leopard
 - Mac OS X 10.7 (Lion)

JavaScript must be enabled.

2.2 Logging into CommPortal BG Admin

To access the CommPortal, go to <http://www.integratelecom.com/support/voicesupport/Pages/hosted-voice-resources.aspx> and click on *User CommPortal Login*,

or

Log into IntegraCare at <https://integracare.integratelecom.com/Login.aspx?ReturnUrl=%2f%3fink%3dwww-top&link=www-top>, click on *Services/Voice Services/Hosted Voice Services/CommPortal*

The following shows a sample CommPortal login page.

Figure 1: CommPortal login page

To log into CommPortal, follow these steps:

1. Enter a phone number with administrative access
2. Enter the password
3. Click on *Login*.

2.3 Using CommPortal BG Admin

Once you are logged into CommPortal you are presented with the Business Group Administrator's homepage.

- Down the left hand side of this page are a series of links which take you to the different pages within CommPortal.
- The main panel shows the contents of the page you've selected.

The name of the user you are logged in as is shown at the top of the page.


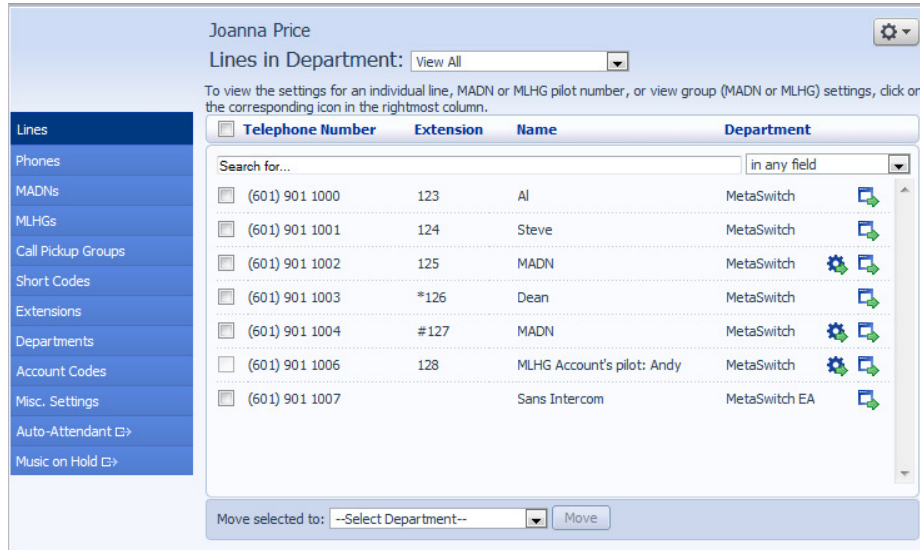











- The options icon  at the top right hand of the page provides you with a drop-down menu containing the following options.
- Open a new browser window with detailed help on using the current page.
- Refresh the current CommPortal page.
- Log out of CommPortal.

Figure 2: CommPortal Business Group Administrator homepage

Joanna Price 

Lines in Department:

To view the settings for an individual line, MADN or MLHG pilot number, or view group (MADN or MLHG) settings, click on the corresponding icon in the rightmost column.

<input type="checkbox"/>	Telephone Number	Extension	Name	Department	
<input type="checkbox"/>	(601) 901 1000	123	Al	MetaSwitch	
<input type="checkbox"/>	(601) 901 1001	124	Steve	MetaSwitch	
<input type="checkbox"/>	(601) 901 1002	125	MADN	MetaSwitch	 
<input type="checkbox"/>	(601) 901 1003	*126	Dean	MetaSwitch	
<input type="checkbox"/>	(601) 901 1004	#127	MADN	MetaSwitch	 
<input type="checkbox"/>	(601) 901 1006	128	MLHG Account's pilot: Andy	MetaSwitch	 
<input type="checkbox"/>	(601) 901 1007		Sans Intercom	MetaSwitch EA	

Search for...

Move selected to:

3 Managing lines with BG Admin

The *Lines* page is the CommPortal Business Group Administrator's homepage and it will display once you've logged in.

Figure 3: CommPortal Business Group Admin Lines display

Joanna Price

Lines in Department: View All

To view the settings for an individual line, MADN or MLHG pilot number, or view group (MADN or MLHG) settings, click on the corresponding icon in the rightmost column.

Telephone Number	Extension	Name	Department
(601) 901 1000	123	Al	MetaSwitch
(601) 901 1001	124	Steve	MetaSwitch
(601) 901 1002	125	MADN	MetaSwitch
(601) 901 1003	*126	Dean	MetaSwitch
(601) 901 1004	#127	MADN	MetaSwitch
(601) 901 1006	128	MLHG Account's pilot: Andy	MetaSwitch
(601) 901 1007		Sans Intercom	MetaSwitch EA

Move selected to: --Select Department-- Move

This menu shows all the lines within the department that you are an administrator of. To view lines that are in sub-departments, select the sub-department using the drop-down list at the top of the page.

3.1 Creating and managing departments

The BG Admin has the ability to create departments within the business group. To create a business group follow these steps:

Figure 4: Add Department dialog box

Add Department
To add a new department, enter its name, select its parent department and then click **Add**.

Department Name: Sales

Parent Department: --Select Department--

Operator Number: 214-555-1212

Set limits on the number of calls this department can make:

Incoming & Outgoing: Limited 32 calls

Incoming: Limited 20 calls

Outgoing: Limited 12 calls

Add Cancel

1. From the BG Admin Page select the Departments link on the left of the page. Click the *Add Department* button at the bottom of the page and the dialog shown above will appear.
2. Enter the following information.
 - Department Name
 - Parent Directory – If this is a top level department, you will use the Business Group Name. If this is a sub department, this will be the upper level department
 - Operator Number – Enter the number of the line that will act as operator for this department

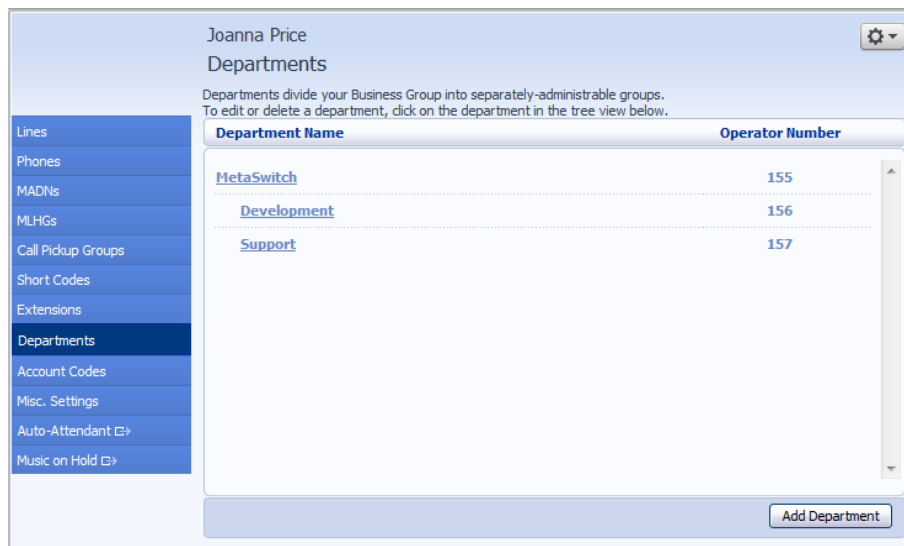
If you plan to limit the number of calls allowed for this department, enter the following information

- Incoming & Outgoing – Enter the total number of combined concurrent calls that this department will be permitted to have active at any given time.
- Incoming – Enter the total number of concurrent incoming calls that this department will be permitted to have active at any given time.
- Outgoing – Enter the number of concurrent outgoing calls that this department will be permitted to have active at any given time.

NOTE: To allow any mix of incoming & outgoing enter the same value in all three fields, or set both the Incoming and the Outgoing fields to Unlimited.

Some example departments are given below.

Figure 5: Example departments



3.2 Moving lines between departments

To move lines between departments, follow these steps:

1. Select the line using the checkbox to the left of the line
2. Select the department you wish to move the line to using the drop-down list at the bottom of the page.
3. Click on the *Move* button.

3.3 Logging into a user's account

To log on as a regular user, follow these steps:

1. Select the Individual Line icon to the right of the line.
2. This will launch the regular CommPortal interface for that line in a new browser window.

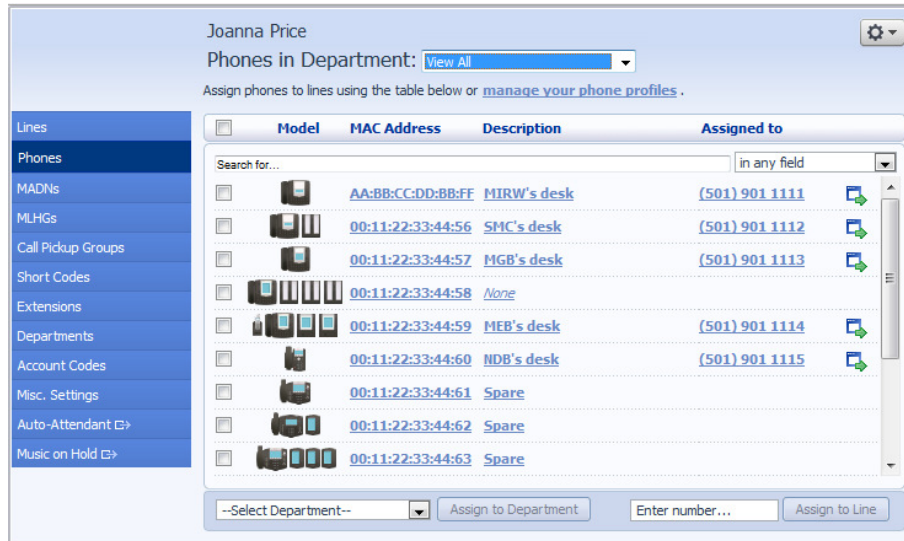
Figure 6: Call Manager

For more details on modifying settings on behalf of an individual user see the *Metaswitch Hosted PBX End User Guide*.

4 Managing phones with BG Admin

To access the Phones page select the *Phones* link on the left hand side of the page.

Figure 7: CommPortal Business Group Admin Phones display



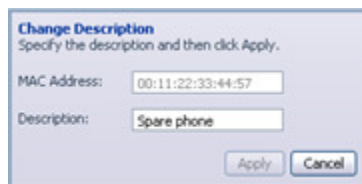
This page shows you all of the known phones in the current department. To view the phones in sub-departments, select a different department using the drop-down list at the top of the page.

4.1 Modify phone description

To change the description given to a phone, follow these steps:

1. Click on the current description of the phone.
2. Enter the new description.
3. Click on the *Apply* button.

Figure 8: Modify Phone Description dialog box



4.2 Moving phones between departments

To move a phone between departments, follow these steps:

1. Select the phone you wish to move using the checkbox to the left of the phone.
2. Select the department you wish to move the phone to using the drop-down list at the bottom of the page.
3. Click on the *Assign to Department* button.

4.3 Assigning a phone to a line

To assign a phone to a line, follow these steps:

1. Select the phone you wish to assign a line to using the checkbox to the left of the phone.
2. Enter the number of the line you wish to assign to the phone using the *Enter number ...* box at the bottom of the page.
3. Click on the *Assign to Line* button.

4.4 Removing a phone from a line

You may wish to remove a phone from a line if, for example, the phone breaks and you need to assign a new phone to the user's line.

To remove a phone from a line, follow these steps:

1. Select the phone by using the checkbox to the left of the phone.
2. Select the department the unassigned phone should be part of.
3. Click on the *Assign to Department* button.

4.5 Phone profiles - Endpoint Pack phones

This section describes how to work with phone profiles for SIP phones provisioned using an Endpoint Pack. If your phones are provisioned using Built-In provisioning, you should refer to section 4.5.

This section describes how to use the Phone Profile Editor (also called the CommPortal Phone Configurator) to work with Endpoint Pack phone profiles.

If you only have Endpoint Pack phone profiles, you do not need Adobe Flash. However, if you have any Built-In phone profiles, you must have Adobe Flash version 9.0 or greater.

Managing phone profiles

To manage the Endpoint Pack phone profiles for the department you are an administrator for, follow these steps:

1. Click the *manage your phone profiles* link towards the top of the CommPortal page.
2. This launches a new window with the Phone Profile Editor (also called the CommPortal Phone Configurator).

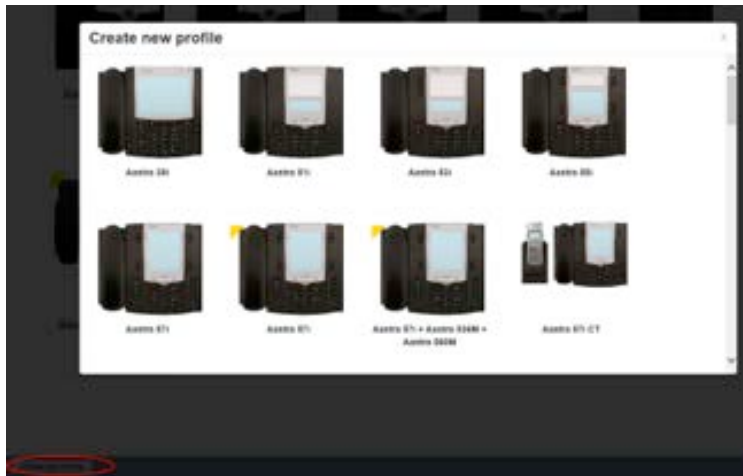
Figure 20: Default Phone Profile Editor



Adding a new phone profile

By default a department does not contain any phone profiles. To add a new phone profile, follow these steps:

Figure 21: Create New Profile dialog box



1. Click on the Create new profile button at the bottom left of the screen to launch the Create new profile screen which displays pictures of the handsets of all the available phone models.
2. Select the model of phone you want to create a profile for.
3. Click on OK.
4. A default profile for the phone will now appear in the Phone Profile Editor.
5. Phone profiles with a yellow triangle in the top left corner are provisioned using the Built-In method and you should refer to section 5.5 for information on viewing and editing these profiles.

Modifying a phone profile

To open the phone profile that you want to modify, either click on the picture of the phone or select Edit from the drop-down underneath the picture.

Figure 22: Modifying a phone profile



1. On this screen, you can click on the arrows alongside the headings to expand the individual settings so that you can make changes to them.
2. For each setting, use the drop-down to select a new value.
3. Click the padlock icon if you want to lock or hide this setting so that a subscriber cannot change it.
4. The column on the far right indicates when the default value is set in the phone profile. You can use the Reset all to defaults button at the bottom of the screen if you want this profile to use the default values.
5. Settings that you cannot change will be grayed out.
6. For some phone models, some settings may be grouped together into 'hotspots'.
 - If you hover your mouse over the handset image and a hotspot appears, you can click on this so that only the settings that relate to the keys in this hotspot appear on the right-hand side.
 - Click on any other area of the phone image to restore the full list of settings.
7. Some settings are shared between Phone Profiles and are displayed in a Shared Settings panel.
 - Click Edit shared settings to view and, if you have permission, modify these settings. For example, you may want to enable or disable the use of XML applications for this phone.
8. To save your changes permanently click on Save changes. Changes won't be applied to the phones themselves until they are next rebooted.
9. To abandon any changes you have made in this session, or since you last saved, click on Discard Changes.

Logging out of the Phone Profile Editor

Close your browser window to log out of the Phone Profile Editor.

4.6 Modifying phone configuration as a user

To log into and modify the phone settings as one of your users, follow these steps:

1. Click on the Individual Line icon to the right of the phone.
2. Follow the instructions on using the Phone Configurator to manage the configuration of individual phones which are given in the *Hosted Voice Service End User Guide*.

4.7 Installing a new phone

To install a new phone, follow these steps.

1. Ensure the phone is compatible with our service. If you have bought the phone from Metaswitch or one of our approved partners it will be compatible.
2. If you need to connect a PC to the network through the phone, connect the computer's Ethernet cable into the PC jack of the phone.
3. Connect a spare telephone Ethernet cable into the LAN or Network socket of the new phone and connect to you network jack.
4. The phone should now power up and retrieve its configuration from our server.
5. Once the phone has fully powered up, if there is no phone number configured on the phone you will need to assign the phone to a spare line to the phone using CommPortal. See section 4.3 for instructions on how to do this.

4.8 Replacing with an identical phone model

To replace a phone with one of an identical model, follow these steps:

1. Using CommPortal, copy the configuration of the existing phone to the new phone by following the instructions in Section 4.7.
2. Using CommPortal, remove the existing phone from the phone line, by following the instructions in section 4.4.
3. Using CommPortal, add the new phone to the line which was removed from the old line, by following the instructions in section 4.3.

Note: The new phone must be in the same department as the phone being replaced. If it isn't, you or another administrator with sufficient permissions must move the phone to the appropriate department before you can assign the line to it. Follow the instructions in section 4.2 to perform this task.

4. Unplug the computer's Ethernet cable from the old phone if one is plugged in.
5. Unplug the telephone Ethernet cable form the old phone.
6. Plug the computer's Ethernet cable into the PC socket of the new phone.
7. Plug the telephone Ethernet cable into the new phone.

The new phone should now power up and retrieve its configuration from the server. The new phone will be configured identically to the old phone.

4.8.1 Replacing with a different phone model

To replace a phone with one of a different model, follow these steps:

1. Using CommPortal, remove the existing phone from the phone line, by following the instructions in section 4.4.
2. Using CommPortal, add the new phone to the line which was removed from the old line, by following the instructions in section 4.3.

Note: The new phone must be in the same department as the phone being replaced. If it isn't, you or another administrator with sufficient permissions must move the phone to the appropriate department before you can assign the line to it. Follow the instructions in section 4.2 to perform this task.

3. Unplug the computer's Ethernet cable from the old phone if one is plugged in.
4. Unplug the telephone Ethernet cable form the old phone.
5. Plug the computer's Ethernet cable into the PC socket of the new phone.
6. Plug the telephone Ethernet cable into the new phone.

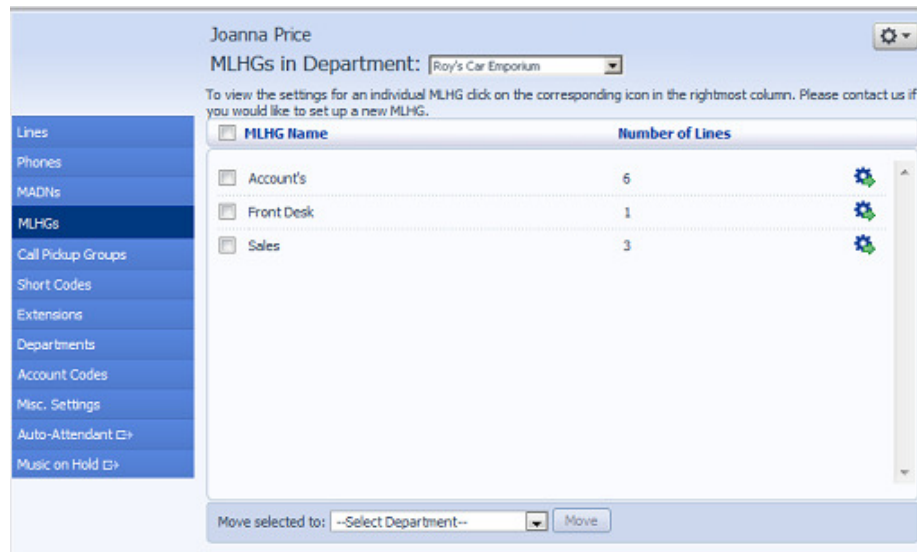
The new phone should now power up and retrieve its configuration from the server. It will have the default configuration defined by any department profiles, and can now be configured by the phone user. For more information on department phone profiles, see section 4.5.

5 Managing Multi Line Hunt Groups (MLHGs)

5.1 Viewing MLHGs

The MLHGs page displays all of the MLHGs in the Business Group or department(s) that you have permission to administer.

Figure 20: CommPortal Business Group Admin MLHGs display



To view MLHGs in sub-departments, select the sub-department from the drop-down list at the top of the page.

If you are using the Integrated ACD (Automated Call Distribution) feature to monitor the activity of your MLHGs, this screen will also display a *View Statistics* button that allows you to view and download the information described in section 5.4,

Using MLHG Statistics.

5.2 Moving MLHGs to another department

To move an MLHG between departments, follow these steps:

1. Select the MLHG using the checkbox to the left of the MLHG.
2. Select the department you wish to move the MLHG to using the drop-down list at the bottom of the page.
3. Click on the *Move* button.

5.3 Viewing and modifying MLHGs

To view the details of an MLHG and to modify its settings you first need to select that MLHG. Do this by selecting the Group icon to the right of the MLHG.

This takes you to a series of tabs for that MLHG.

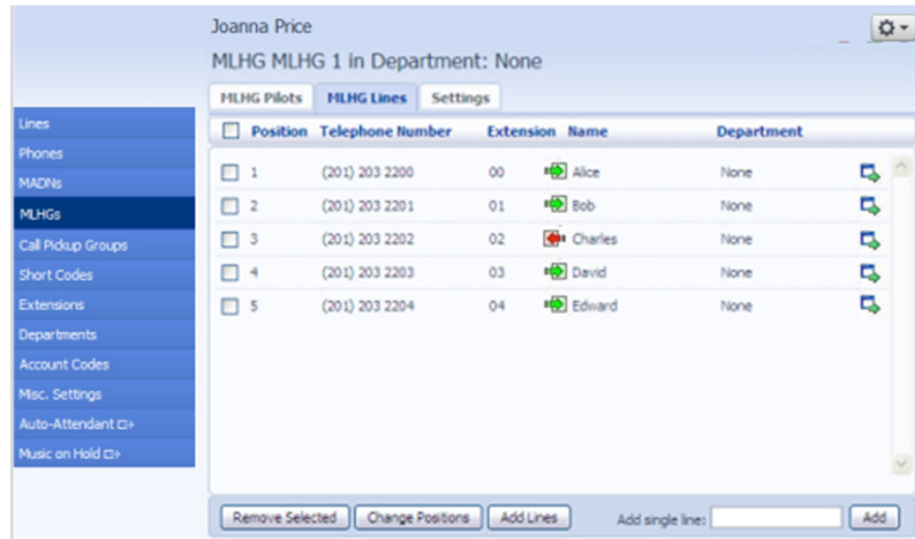
5.3.1 MLHG pilots

The MLHG Pilots tab displays any pilot numbers for this MLHG. A pilot number is one which when called, enters this MLHG.

5.3.2 MLHG lines

This tab displays all of the lines which are members of this MLHG. There is an icon for each line which tells you whether each member is currently logged into this MLHG.

Figure 21: MLHG Lines tab



Adding lines

To add lines to the MLHG, perform one of the following two steps:

1. If you know the number, enter it in the text box on the bottom right and click *Add*.
2. If you don't know the number, click on *Add Lines*. To select one or more lines to add, use the checkboxes to the left of the lines and click *Add Selected*.

Figure 22: Add Lines to MLHG dialog box

<input type="checkbox"/>	Telephone Number	Extension	Name
<input type="checkbox"/>	(806) 322 5789	5789	Chris Carter
<input type="checkbox"/>	(806) 322 5790	5790	Deano Dickenson
<input type="checkbox"/>	(806) 322 5792	5792	Fred Finlay
<input type="checkbox"/>	(806) 322 5793	5793	Gail Girton
<input type="checkbox"/>	(806) 322 5794	5794	Harry Henryson
<input type="checkbox"/>	(806) 322 5795	5795	Ivan Ivanovich

Removing lines

To remove a line from the MLHG, follow these steps:

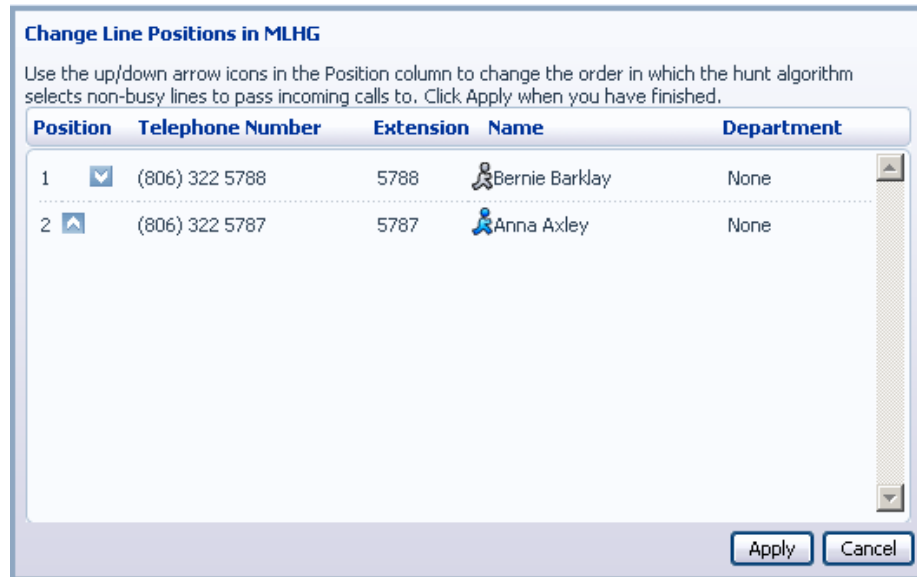
1. Select the line to remove by using the checkbox to the left of it.
2. Click on the *Remove Selected* button.

Changing positions

To change the positions of lines within the MLHG, follow these steps:

1. Click on the *Change Positions* button.
2. Move lines up and down using the icons.
3. Click on *Apply*.

Figure 23: Change Line Positions in MLHG dialog box



5.3.3 Settings

The Settings tab lets you view and change various settings for the MLHG.

Preferences

The Preferences page allows you to rename the MLHG. To rename the MLHG, follow these steps:

1. Type the new name in the text box.
2. Click on *Apply*.

Hunt settings

The Hunt Settings page allows you to see the call distribution algorithm that is currently in use for this MLHG and other detailed MLHG settings.

5.4 Using MLHG Statistics

If you have the Integrated ACD (Automated Call Distribution) feature in your deployment, the *View Statistics* button at the bottom of the main MLHG page in CommPortal allows you to access detailed real-time and historical information about the call queues and agents in the MLHG(s) that you administer.

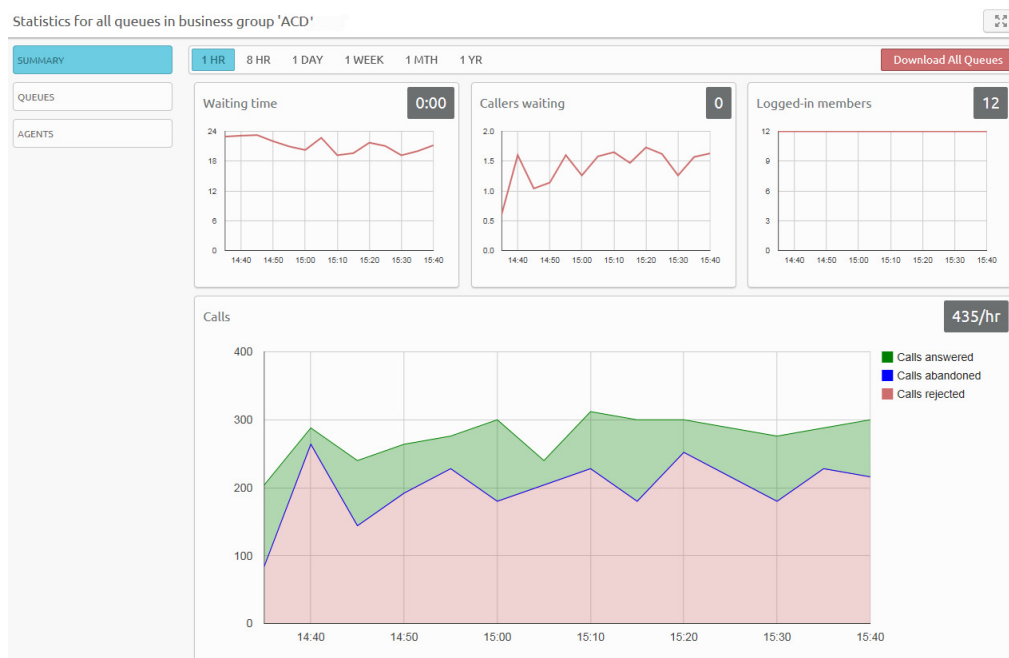
In this interface, the term 'queue' refers to an MLHG and 'agent' to its members.

MLHG members (agents) can also access a screen in CommPortal that shows real-time information about the MLHG(s) that they belong to, including displaying caller information when an incoming call is received. The *Hosted PBX End User Guide* describes this screen in more detail.

5.4.1 Summary screen

Clicking the *View Statistics* button launches the Summary screen in a new browser window.

Figure 24: BG Administrator Summary statistics screen



By default, the Summary screen will show the activity for all the queues together (if you have more than one queue) over a 1 hour period.

The on-screen graphs display statistics for

- Waiting time (in seconds)
- Callers waiting (if you have disabled queuing, you will not see this statistic)
- Logged-in members
- Calls (the rate of calls per hour).

The white numbers in the gray boxes on the top right of each graph are a snapshot at the current time. The graphs show historical data for the time period selected.

Hover over the data lines on the graphs to see tooltips giving information for a specific time within the time period of the graph.

Click on a time period at the top of the screen to show historical data for a different time period, for example 1 Day or 1 Week.

Click on *Queues* or *Agents* on the left-hand side of the screen to see more detailed data for your Queues (described in section 5.4.2) and Agents (described in section 5.4.3).

Click the red *Download All Queues* button at the top right of the screen to download a .CSV file that has more detailed statistics of all your queues for the selected time period.


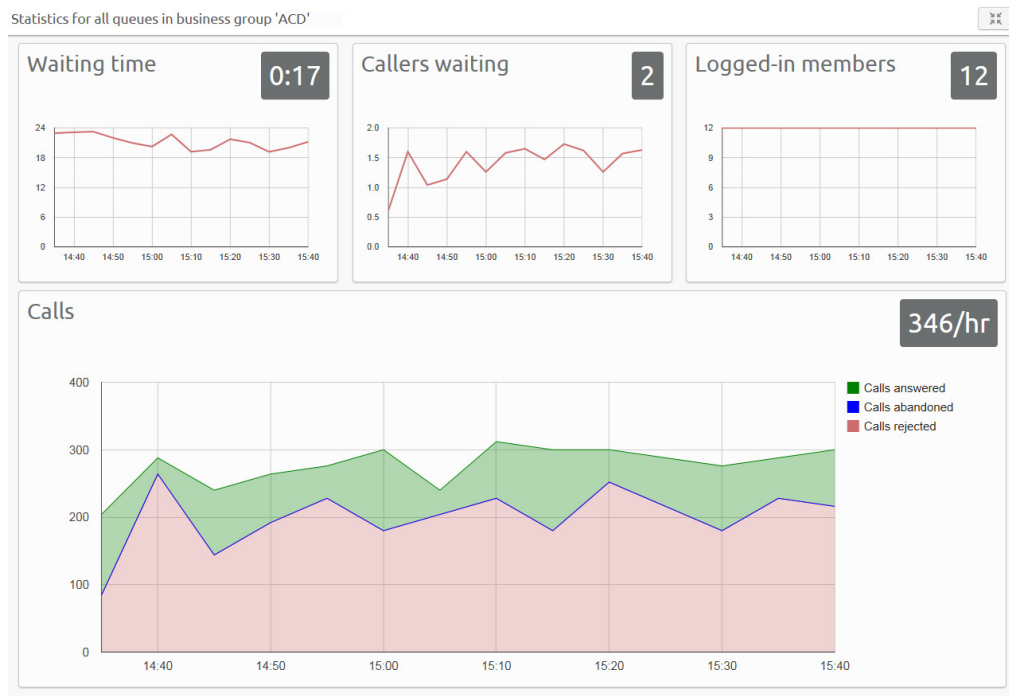

Click the  button at the top right of the screen to display a Wallboard view that removes the navigation, enlarges the graphs and shows data for the time period that is currently selected.

Figure 25: Summary Wallboard view



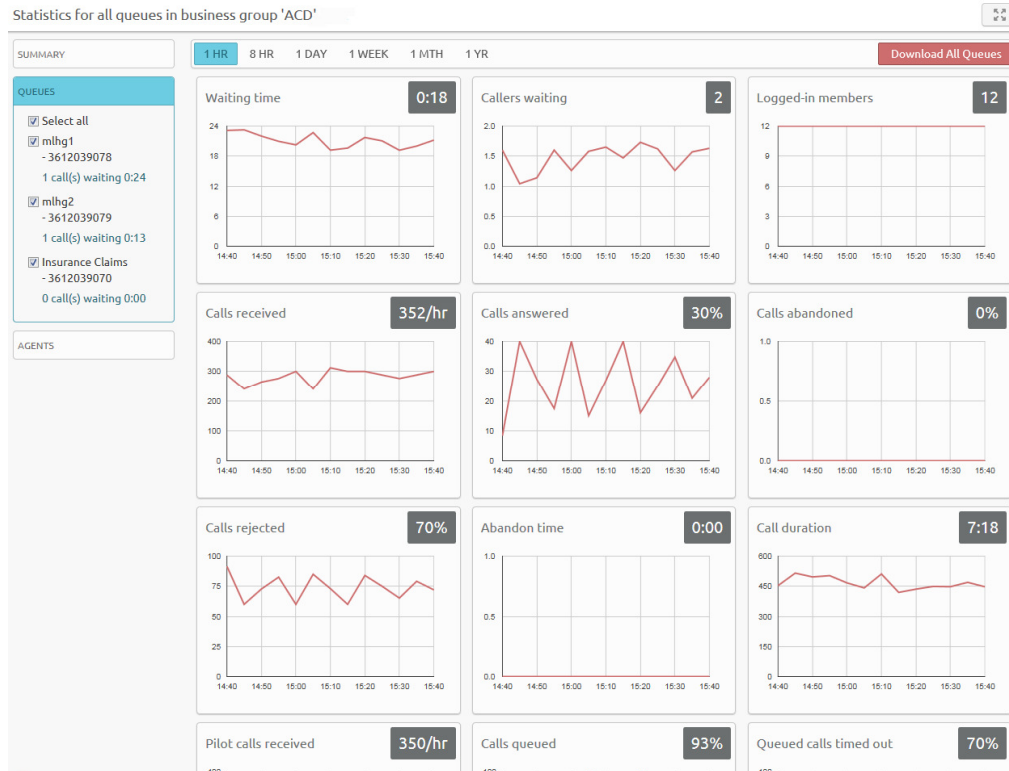
Click the  button to return to the standard Summary view.

You should refer to section 5.4.4 for more information on interpreting the statistics shown on the Summary screen.

5.4.2 Viewing Queue statistics

Clicking the *Queues* box on the left of the Summary screen changes the browser window to one that has detailed information on the queues that you administer.

Figure 26: BG Administrator Queues statistics screen



As on the Summary screen, by default the on-screen graphs display the current value (in the gray box on the top right of each graph) and 1 hour historical data for all your queues.

Hover over the data lines on the graphs to see tooltips giving information for a specific time within the time period of the graph.

Click on a time period at the top of the screen to show historical data for a different time period, for example 1 Day or 1 Week.

Use the checkboxes in the box on the left-hand side to view data either for all the queues that you administer, or for one or more individual queues.

Click *Download All Queues* to download this information about all your queues in .csv format.


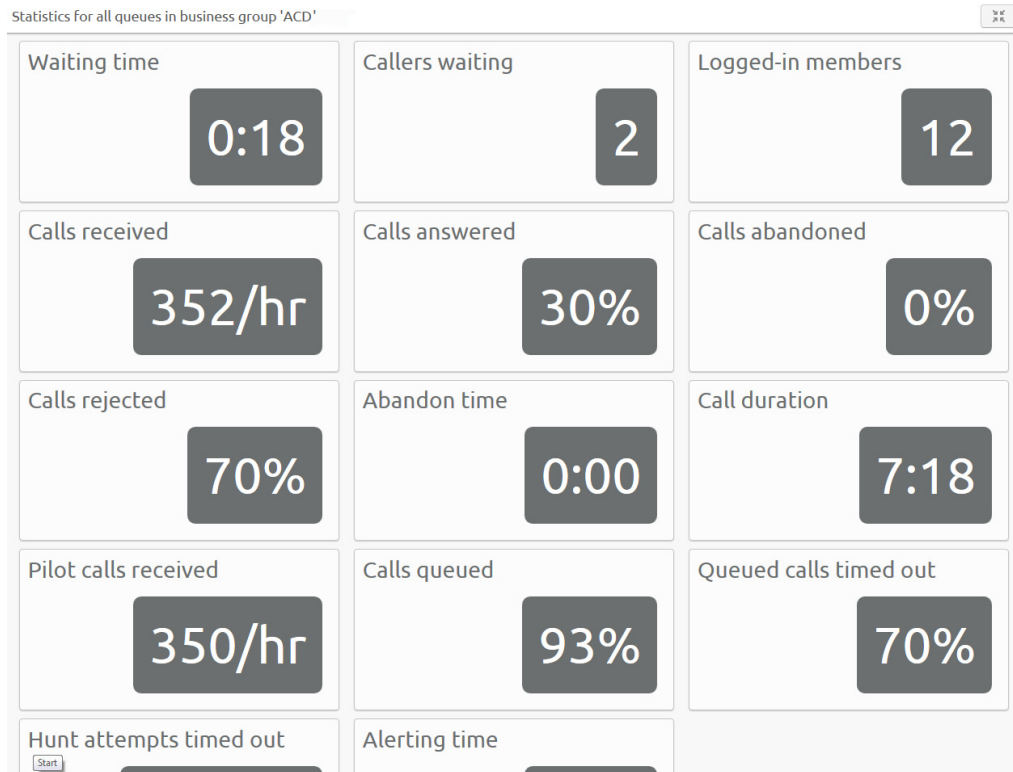

Click the  button at the top right of the screen to display a Wallboard view of the Queues screen that removes the navigation and graphs, and just shows real-time values for each statistic.

Figure 27: Queues Wallboard view

Click the  button at the top of the screen to return to the original view.

The graphs and statistics displayed on this screen show the following information. You should refer to section 5.4.4 for more information on interpreting these statistics.

Waiting time (duration)

This is the sum of queuing and alerting (when a call has been hunted to a particular agent and that agent's line is ringing) times.

Callers waiting (calls)

This is the number of callers waiting in the queue. Calls arriving in the MLHG may be put in a queue if all the lines are busy and your MLHG is configured to hold callers in a queue.

When an agent becomes available, the first call in the queue will be hunted to that agent and it will not be counted in this statistic even if the agent has not yet answered the call.

You will not see this statistic if your MLHG is configured to only accept a call when an agent is available.

- Logged in members (agents)
The number of agents who are currently logged in
- Calls received (calls/hr)
This is the rate at which incoming calls arrive.

- **Calls answered (%)**
This is the percentage of received calls that were answered.
- **Calls abandoned (%)**
This is the percentage of received calls where the caller hung up before it was answered.
- **Calls rejected (%)**
This is either the percentage of received calls that were rejected as busy (if you have disabled queuing) or the percentage of received calls that were rejected when the queue was full.
- **Abandon time (duration)**
The average time a caller waits in a queue before hanging up without their call being answered.
- **Call duration (duration)**
The average duration of answered calls
- **Calls received to pilot number(s) (calls/hr)**
Calls may arrive in a queue either via the pilot number(s) or by calling one of the agents directly.

You can configure your queue so that, if that agent is busy when the call arrives, the call is then queued as if it arrived via the pilot number(s).

- **Calls queued (%)**
This is the percentage of incoming calls that are queued.

If all agents are busy in other calls, an incoming call will be queued until an agent is available.

If you have disabled queuing so a call is only accepted if an agent is available, this statistic will be hidden.
- **Queued calls timed out (%)**
You can configure your queue to timeout calls that have been queued for longer than a specified time. However, we would recommend implementing a different behavior in this scenario, for example by forwarding the caller to voicemail.

If you see a lot of calls being timed out, then you probably need to add more agents to the queue.

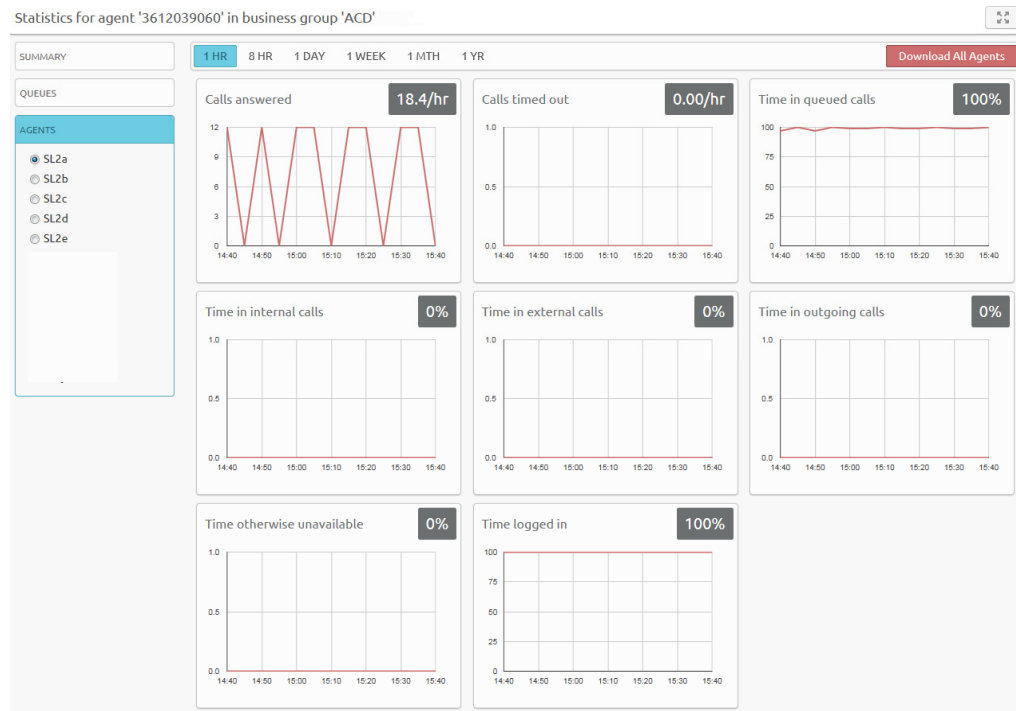
If queuing has been disabled, a call will only be accepted if an agent is available, and this statistic will be hidden.

- **Hunt attempts not answered (calls/hr)**
This is the number of calls that were hunted to a particular agent but the call timed out before the agent answered, and the call was then hunted to another agent. If the caller simply hung up before the agent answered, this is not counted in this statistic. This statistic is only shown if hunt on no answer is configured for this MLHG. This statistic, along with Alerting time, provides a useful metric of how responsive your call center agents are.
- **Alerting time (duration)**
This is the average time between the call being hunted to an agent and the agent answering their phone. This statistic, along with Hunt attempts not answered, provides a useful metric of how responsive your call center agents are.

5.4.3 Viewing Agent statistics

Clicking the *Agents* box on the left of the Summary screen changes the browser window to one that has detailed information on each of the agents who belong to the queues that you administer.

Figure 28: BG Administrator Agents statistics screen



As on the Summary and Queues screens, by default the on-screen graphs display the current value (in the gray box on the top right of each graph) and 1 hour historical data.

Hover over the data lines on the graphs to see tooltips giving information for a specific time within the time period of the graph.

Click on a time period at the top of the screen to show historical data for a different time period, for example 1 Day or 1 Week.

By default, the graphs will show data for the first agent listed in the MLHG. Use the radio buttons on the left-hand side to select an Agent for whom you want to display statistics. Agents are displayed by name (if configured) or DN.

Click *Download All Agents* to download information about all your agents in .csv format. This includes statistics per agent for each queue that they belong to.


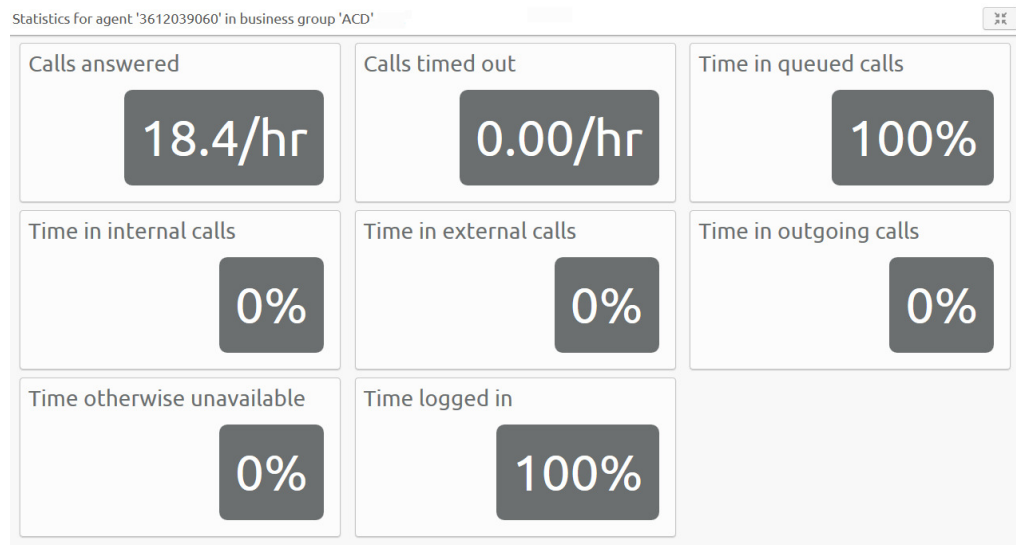

As with the Summary and Queues screens, click on the  button at the top right of the screen to display a Wallboard view of the Agents screen that removes the navigation and graphs, and just shows real-time values for each statistic for the agent that you have currently selected.

Figure 29: Agents Wallboard screen



Click the  button at the top of the screen to return to the original view.

The graphs and statistics displayed on these screens show detailed information on each agent's activity.

The statistics shown on-screen for each agent are a total of the agent's activity across all the queues that they belong to. You should refer to section 5.4.4 for more information on interpreting these statistics.

- **Calls answered (calls/hr)**
The rate at which this agent answered incoming calls.
- **Calls unanswered (calls/hr)**
The rate at which this agent failed to answer calls (the calls may therefore have been hunted to another agent). This statistic tracks calls that were unanswered because the call was timed out when ringing this agent. If the caller simply hung up, then that is not counted here.

- Time in queued calls (%)
The time this agent spent in calls that arrived via a queue.
- Time in internal calls (%).
The time this agent spent in calls from other members of their Business Group.
- Time in external calls (%).
The time this agent spent in calls dialed directly to the agent from outside the Business Group.
- Time in outgoing calls (%)
The time this agent spent in outgoing calls.
- Time otherwise unavailable (%)
The time that this agent was unavailable to answer calls without already being in a call. For example because they enabled Do Not Disturb on their line.
- Time logged in (%)
The time this agent was logged in to a queue. This number may exceed 100% if the agent is a member of more than one queue.

5.4.4 Interpreting MLHG statistics

On each screen, the white numbers in the gray boxes on the top right of each graph or on the Wallboard views are a snapshot at the current time and represent real-time values. The graphs show historical data for the time period selected.

The statistics auto-refresh to keep the data current. This happens without the page reloading.

For real-time data, the statistics auto-refresh every 30 seconds.

For historical data, the statistics auto-refresh every 5 mins when the 1 or 8 hour views are selected, every hour when the 1 day or 1 week views are selected or every day when the 1 month or 1 year views are selected.

The list of queues and agents currently configured auto-refreshes every 5 minutes.

The statistics shown on the Integrated ACD screens are calculated using different metrics.

The statistics always use the mean when combining multiple queues, or combining 12 x 5min stats into 1 hour and 24 x 1 hour stats into 1 day. The running average is used for the real-time value of calculating event based statistics (that is, all statistics except Callers waiting, Logged in members). This is therefore effectively a weighted mean of the last ~5 events.

Some statistics are calculated as a percentage that will be a proportion of the time period selected spent on that particular activity. For example, if the 1 Hour time period is selected, statistics are shown in 5 minute segments, and the current 5-minute period would therefore be 300 seconds.

The number of calls per hour statistic is updated as calls arrive, and is calculated as 1 divided by the gap between the two most recent calls. There is a running average that takes the mean of the most recent values (for example the last 5 calls), but weighted so that the most recent changes count for more. If the rate of calls suddenly changes, the value will still partly reflect the old rate until several new calls have arrived.

This means that during low call volumes the real-time statistic may at first seem too high because it now takes a long time for a call to arrive at the new rate.

For historical values, the statistic takes the number of calls and divides by the granularity (for example, if you have 2 calls in 5 minutes, you will have 24 calls per hour).

For the following statistics, the real-time values are updated as new data becomes available.

- Waiting time
- Abandon time
- Call duration
- Alerting time

If there are very low call volumes, then the last call of the appropriate type may have been some time ago and so the real-time value will become stale. For example, a call arrives and is answered, and the duration of the call is 5:43. There are no further calls for the next hour, but the Call duration statistic remains 5:43. If a new call arrives, was answered and the call duration was 1:23, the Call duration statistic is updated to with this new value (though it will still be a running average of the last few calls, so will not drop immediately all the way down to 1:23).

If there are no calls currently waiting or currently active then the waiting time or call duration will be reported as zero

The following statistics are tracked as numbers. The real time value is the actual number at that refresh point, whereas the graph is the mean over that time period. If an agent logs out during the period of the graph, they will be shown as logged in for less than 100% of the time. For example, an agent logging out for 1 minute in a 5 minute period will be shown as logged in for 80% of the time. Callers waiting may show as a fraction when calculating historical values.

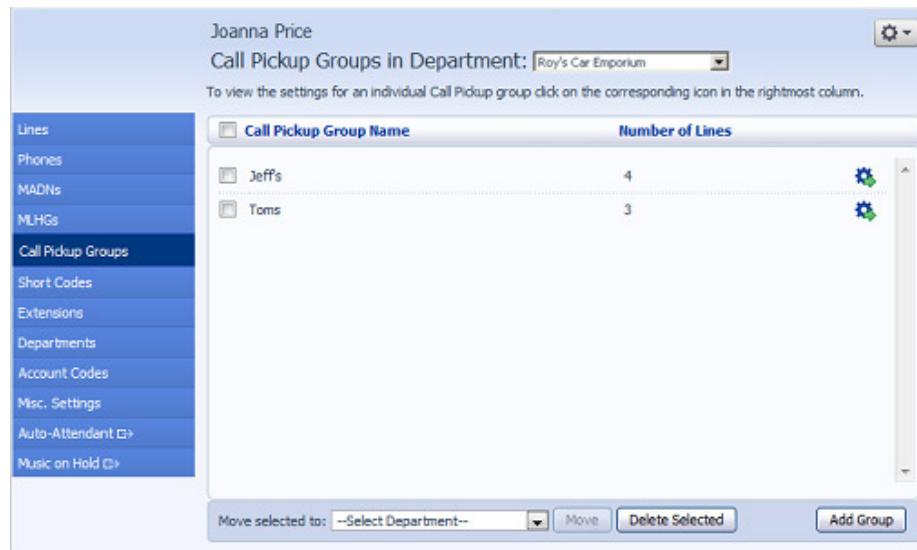
- Callers waiting
- Logged in members

6 Managing Call Pickup Groups

6.1 Viewing Call Pickup Groups

The Call Pickup Groups page displays all of the Call Pickup Groups in your department.

Figure 30: CommPortal Business Group Admin Call Pickup Groups display



To view Call Pickup Groups in sub-departments, select the sub-department from the drop-down list at the top of the page.

6.2 Moving Call Pickup Groups to another department

To move Call Pickup Groups between departments, follow these steps:

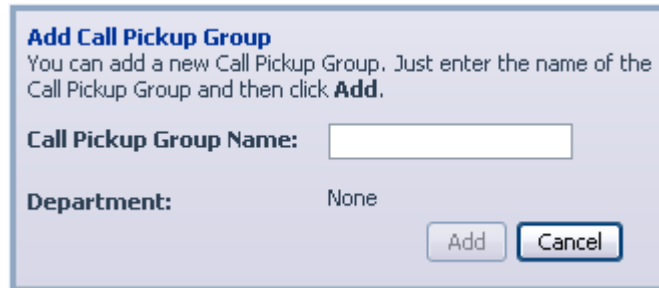
1. Select the Call Pickup Group using the checkbox to the left of the Call Pickup Group.
2. Select the department you wish to move the Call Pickup group to using the drop-down list at the bottom of the page.
3. Click on the *Move* button.

6.3 Adding Call Pickup Groups

To create a new Call Pickup Group, follow these steps:

1. Click on *Add Group*.
2. Enter the name of the new Call Pickup Group in the text box.
3. Click on *Add*.

Figure 31: Add Call Pickup Group dialog box



Add Call Pickup Group
You can add a new Call Pickup Group. Just enter the name of the Call Pickup Group and then click **Add**.

Call Pickup Group Name:

Department: None

6.4 Deleting Call Pickup Groups

To delete a Call Pickup Group, follow these steps:

1. Select the Call Pickup Group using the checkbox to the left of the Call Pickup Group.
2. Click on the *Remove Selected* button.

6.5 Viewing and Modifying Call Pickup Groups

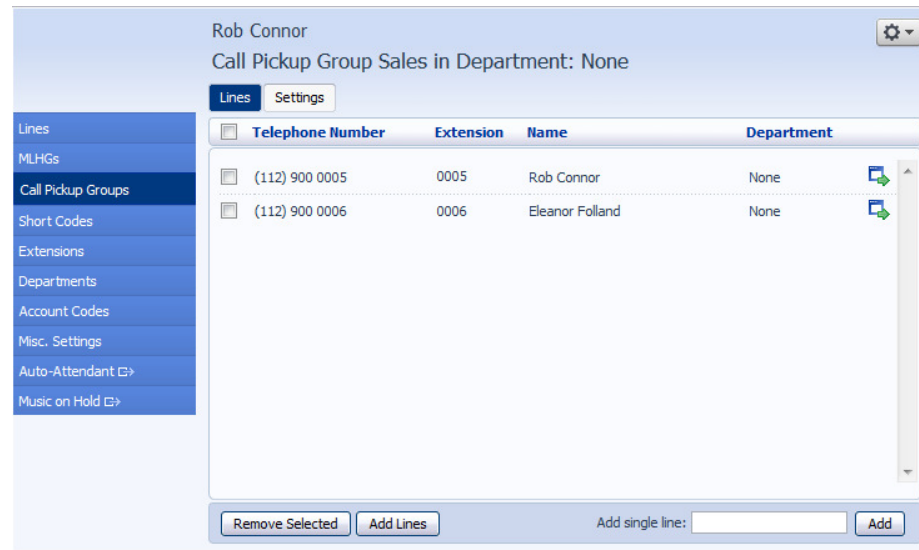
To view the details of a Call Pickup Group and to modify its settings, follow these steps:

1. Select that Call Pickup Group by selecting the Group icon to the right of the Call Pickup Group.
2. This takes you to a series of tabs for that Call Pickup Group.

6.5.1 Managing Call Pick Up Group lines

The Lines tab displays all the lines in this Call Pickup Group.

Figure 32: Call Pickup Groups Lines tab



Adding lines

To add lines to the Call Pickup Group perform one of the following two operations:

1. If you know the number, enter it in the text box on the bottom right and click *Add*.
2. If you don't know the number, click on *Add Lines*. To select one or more lines to add, use the checkboxes to the left of the lines and click *Add Selected*.

Figure 33: Add Lines to Call Pickup Group dialog box

<input type="checkbox"/>	Telephone Number	Extension	Name
<input type="checkbox"/>	(806) 322 5790	5790	Deano Dickenson
<input type="checkbox"/>	(806) 322 5792	5792	Fred Finlay
<input type="checkbox"/>	(806) 322 5793	5793	Gail Girton
<input type="checkbox"/>	(806) 322 5794	5794	Harry Henryson
<input type="checkbox"/>	(806) 322 5795	5795	Ivan Ivanovich
<input type="checkbox"/>	(806) 322 5796	5796	Jessica James

Removing lines

To remove a line from the Call Pickup Group, follow these steps:

1. Select the line to remove by using the checkbox to the left of it.
2. Click on the *Remove Selected* button.

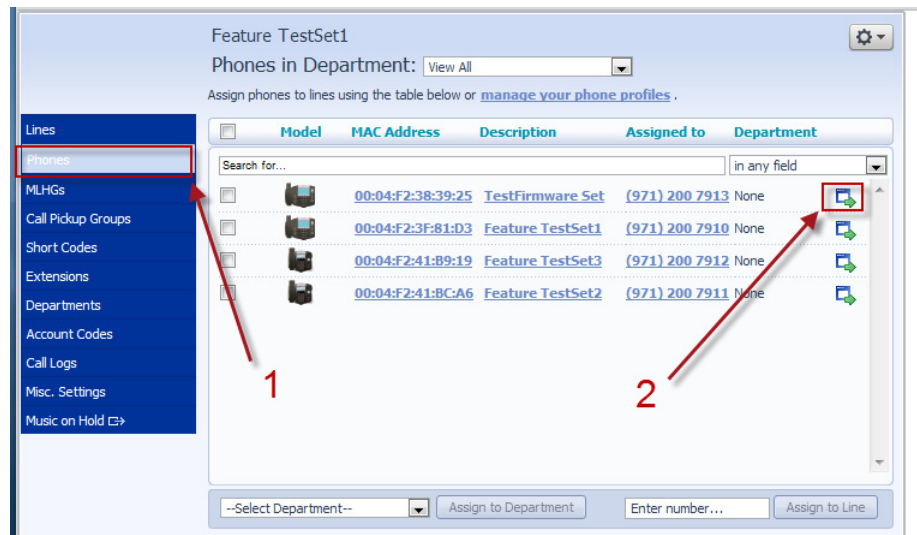
6.5.2 Settings

The Settings tab lets you view and change the name of the Call Pickup Group. To change the name, follow these steps:

1. Enter the new name in the text box.
2. Click *Apply*.

6.6 Managing Phone Paging Groups

In order for the BG Administrator to make the changes they'll need to have a BG capable account and login to the BG admin by going to <http://hostedvoice.integra.net/bg>, once there they'll login and go to the (1) Phones Tab and one at a time they can configure and activate page group membership by going to the (2) window icon that launches the SPS. As shown in this image:

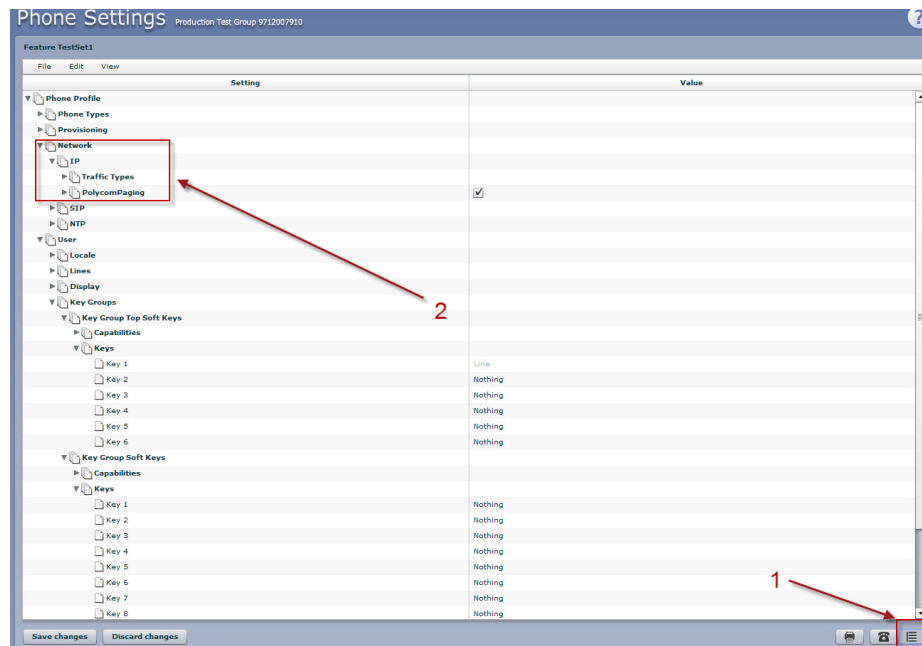


6.6.1 Activating and configuring Page Groups

At this point it's important to understand how the paging service is architected within the Polycom construct and its relative integration with the Metaswitch SIP Provisioning Server. As stated earlier Polycom deploys speakerphone paging groups by enrolling phones into a non-routed multicast group. In the SPS as you configure paging it's important that you configure this multicast paging address so as to NOT conflict with other multicast services that the customer may be deploying on that particular LAN Broadcast domain. For instance the Voice VLAN should not have any other multicast traffic aside from routing protocols that propagate routes through such methods, and if so, the address assigned to the Polycom multicast group must not conflict with those other protocol addresses used. The SPS by default has no address listed in the field; however it is NOT recommended you add any address there.

It is recommended you use any address in the IANA "Unassigned" range. Again it is important to make sure you avoid using a conflicting address as well. By default Polycom phones use 224.0.1.116 (it is registered); although, you can use anything in the range of 224.0.0.114 to 224.0.0.250 (See Reference No. 3 for further detail).

The place to navigate to in order to configure paging in the SPS is to go to the field edit area by selecting the (1) “Outline” icon in the lower right corner and then to key open (2) Network → IP → PolycomPaging as shown here:



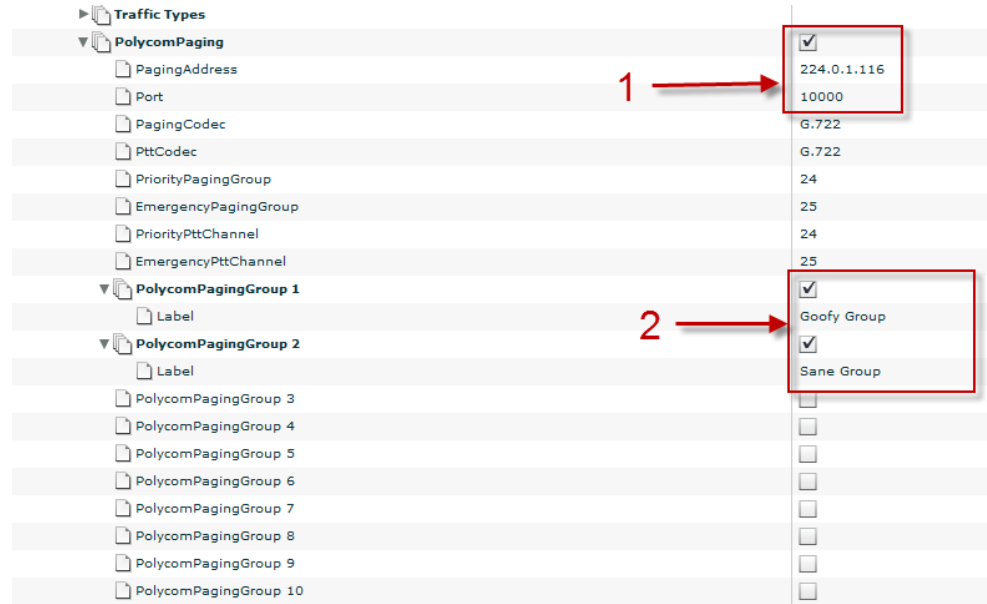
6.6.2 Enable Polycom Paging

Once in to the phone configuration details to enable the Polycom Paging service, (1) check the box to the right of the feature setting and then key it open to enter in appropriate data. The key data fields you'll need to enter is the multicast IP address for Paging Address, the Port that the RTP will stream on. It is important to leave all of the remaining fields leave set at defaults.

Next you will want to define the Polycom Paging Group's this particular endpoint will belong to. Group's 24 and 25 are set aside as default priority and emergency channels and should not ever be altered. To configure the group, (2) enable it by selecting the checkbox. Once you do the Label field will automatically expand.

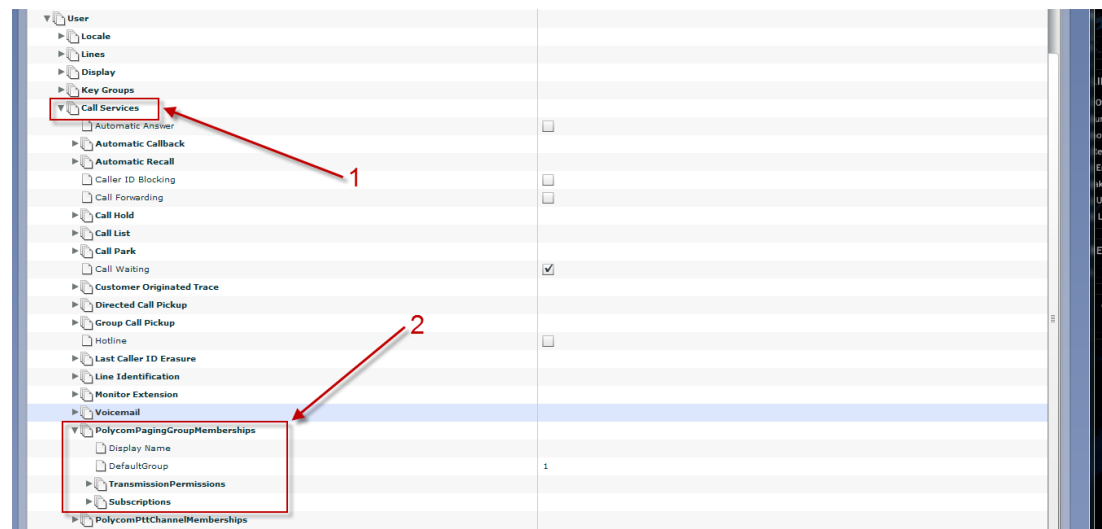
This is where you can label the group. Make sure that when you configure each endpoint/phone that you maintain consistency for these fields across all endpoints otherwise the service will not function.

The following image is an example of what to configure:

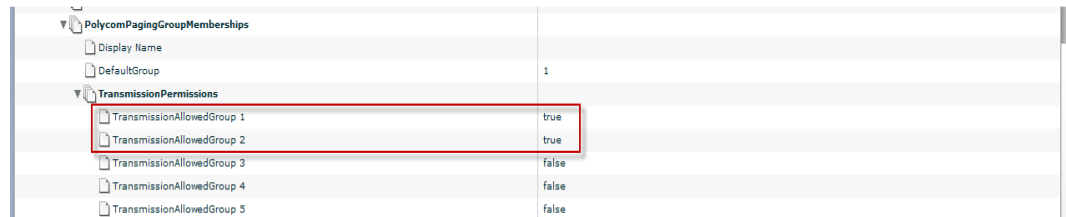


6.6.3 Subscribe Set to Polycom Paging

Next you will want to scroll down to the (1) Call Services section to subscribe the handset to either receive or transmit or both to the group or groups with which you've just created. To do this you must navigate to the (2) Polycom Paging Group Memberships sub section and key it open to where you will see Transmission Permissions and Subscriptions as shown here:



Under the group or groups you want the phone to belong to you'll need to set the Transmission Permissions to "true". In this case we configured groups one and two so we set both to true as shown here:



PolycomPagingGroupMemberships	
Display Name	
DefaultGroup	1
TransmissionPermissions	
TransmissionAllowedGroup 1	true
TransmissionAllowedGroup 2	true
TransmissionAllowedGroup 3	false
TransmissionAllowedGroup 4	false
TransmissionAllowedGroup 5	false

Next you'll need to set the Subscriptions the same way. If this is not enabled this phone set will not retrieve multicast streams intended for the group it belongs to. Shown here is where the setting is changed:



DefaultGroup	1
TransmissionPermissions	
Subscriptions	
SubscribedToGroup 1	true
SubscribedToGroup 2	true
SubscribedToGroup 3	false
SubscribedToGroup 4	false
SubscribedToGroup 5	false

Important things to remember are you can always allow a phone to be subscribed to a group without transmission permissions. This may be the case sometimes to enable only one delegated set to be able to transmit to that group. For example a receptionist may only have Transmission Permissions set to true for the sales phones group and all of the phones in the Sales group may only be subscribed to that group and not have transmission permissions. In order for the receptionist to transmit to that group, she must be a subscriber to that group. You can use any of the 23 available groups and break them out however you want to keep paging groups segregated as well.

6.6.4 How Cisco Paging works

Overview and Important Details

Hosted Voice Services includes a feature that allows one connected Cisco phone to broadcast a message to many phones at the same time. This feature is called “Group Paging” by Metaswitch and Cisco. A set of phones can be configured to participate in a paging group. Any phone that is in a paging group, will have its speaker phone automatically go off hook when paged. This is a one way service, where the paging party talks, and the paged parties all listen. When the paging party goes on-hook, so do all the paged phones. Keep in mind that there is an unrelated set of features and applications that allow for an overhead paging system to be connected to Hosted Voice. Here we are describing the Cisco Group Paging feature only

Requirements

Cisco phones with Firmware 7.5.2 or later

Known Limitations

Cisco Group Paging is Multicast only, and cannot traverse public Internet or NAT/Firewall segments. The impact is that Group Paging is likely only implemented in each location (no cross-location paging without engineering a Layer-3 routed network with IGMP).

Cisco's implementation of Group Paging does not require any Metaswitch signaling or SBC participation in the call. Impact is that there will be no call record, or Service Assurance records. Also, Group Pages cannot be recorded by law enforcement.

There is no group paging support for integrating with IAD FXS ports or the Cisco SPA112 ATA lines. This is a SPA5xx/3xx only feature in Hosted Voice Services.

While the feature is working implemented only in the phones, the current Metaswitch Provisioning Server does not have very good support for automatic and centralized management. As of this writing, Metaswitch has been alerted and Allstream is waiting for commitments to enhance the SIP PS.

Network Provisioning Guide

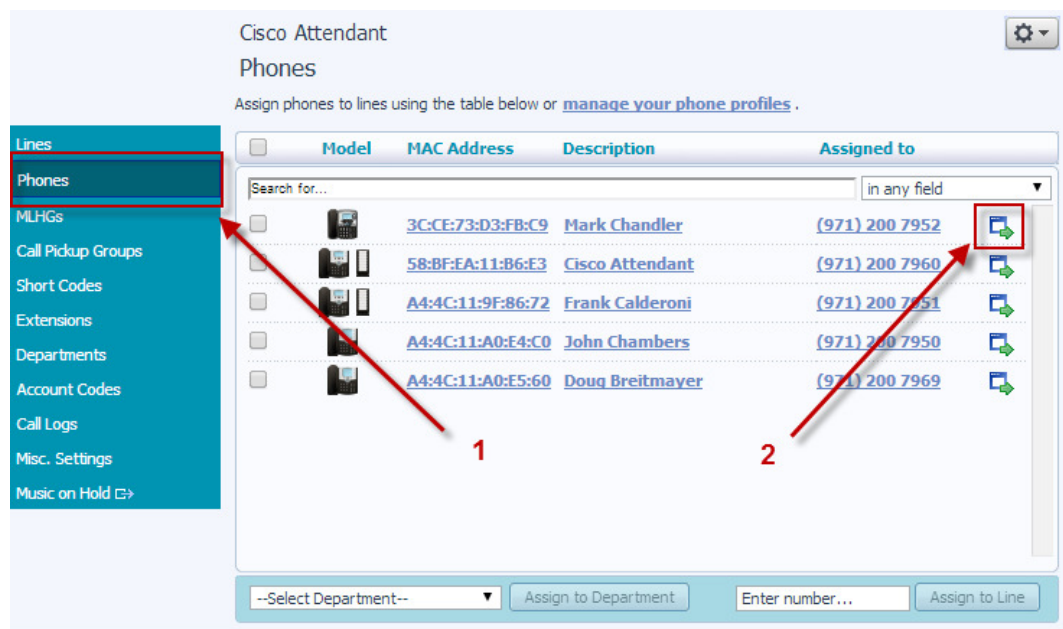
This service is implemented in the Voice VLAN of the customer's network. In general the phones will all be in the same broadcast domain and the Voice VLAN will be private, to a location. That means that Group Paging will only function in one location (broadcast domain) by default. If the customer's voice network includes routed segments, the router will need to include relevant IGMP routes to facilitate communication to all phones that are intended to be in the same paging group.

How to Set up

BG Admin Steps

Business Group Admin Navigation Path

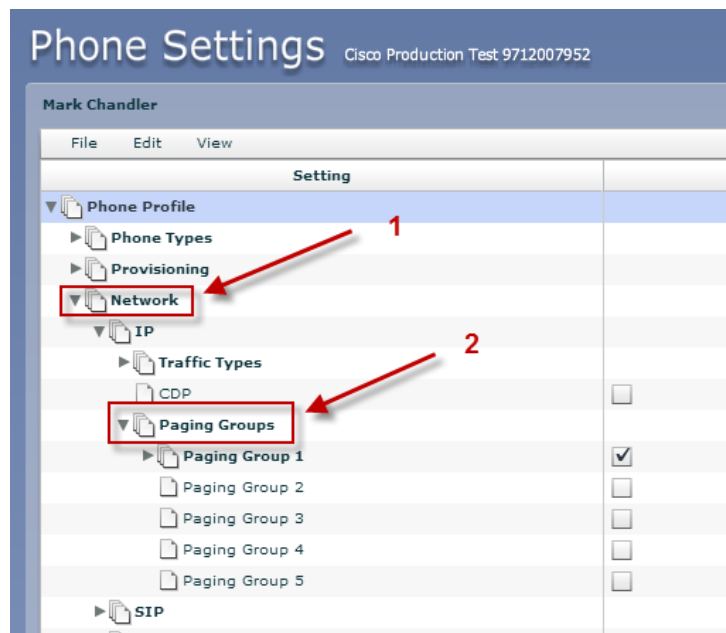
In order for the BG Administrator to make the changes they'll need to have a BG capable account and login to the BG admin by going to <http://hostedvoice.integra.net/bg>, once there they'll login and go to the (1) Phones Tab and one at a time they can configure and activate page group membership by going to the (2) window icon that launches the SPS. As shown in this image:



Activating and Configuring Page Groups

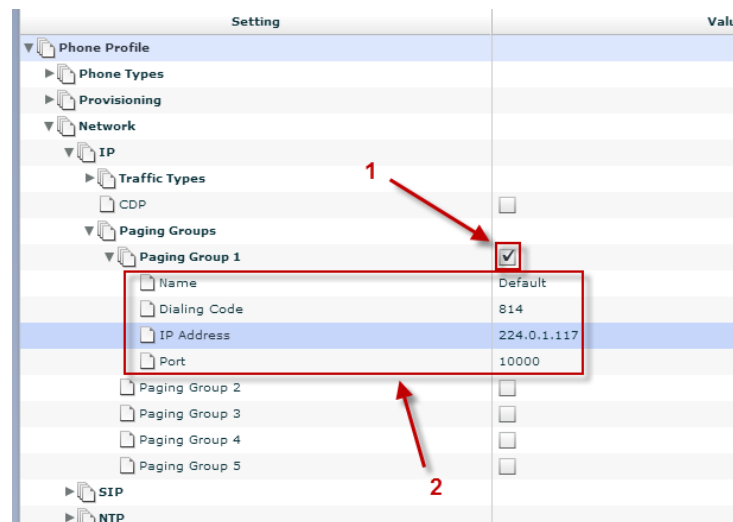
At this point it's important to understand how the paging service is architected with Cisco and its relative integration with the Metaswitch SIP Provisioning Server (SIP PS). Cisco deploys speakerphone paging groups by enrolling phones into a non-routed multicast group. In the SIP PS as you configure paging it's important that you configure this multicast paging address so as to NOT conflict with other multicast services that the customer may be deploying on that particular LAN Broadcast domain. For instance the Voice VLAN should not have any other multicast traffic aside from routing protocols that propagate routes through such methods, and if so, the address assigned to the Cisco multicast group must not conflict with those other protocol addresses used. The SPS by default has no address listed in the field; however it is NOT recommended you add any address there. It is recommended you use any address in the IANA "Unassigned" range. Again it is important to make sure you avoid using a conflicting address as well. By default Cisco phones have not configuration set; however you can use anything in the range of 224.0.0.114 to 224.0.0.250 (See Reference No. 3 for further detail).

The place to navigate to in order to configure paging in the SIP PS is to go to the field edit area by selecting the (1) "Outline" icon in the lower right corner and then to key open (2) Network → IP → Paging Groups as shown here:



Multicast Network Per Group

Once you have navigated to the “Paging Groups” you’ll want to enable the number of groups you want this phone to be able to transmit and receive Pages from. To configure the group first check the box to the right to enable it (1) and then key open that group to configure (2) the Name, Dialing Code to engage the page function, the Multicast IP Address and the UDP port it will communicate on as shown in the following picture:

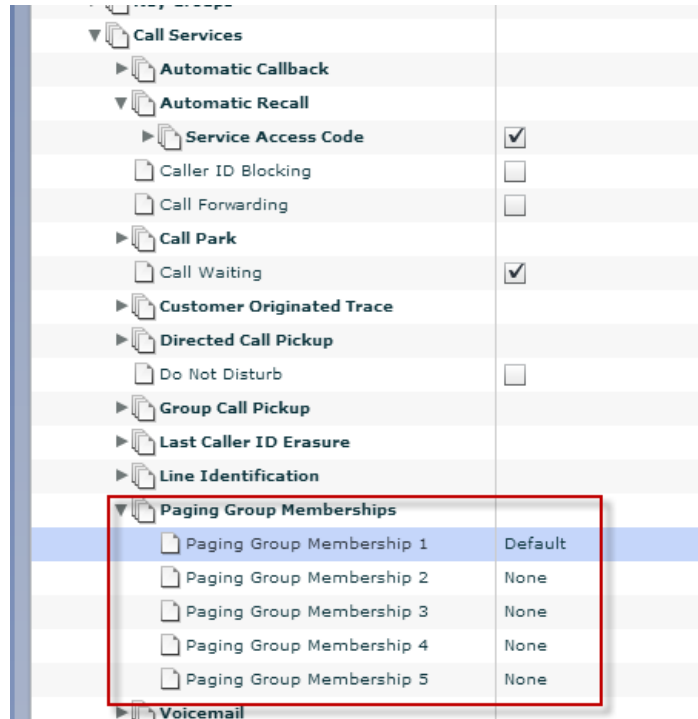


When entering in the name make sure that each group has a unique name as it will be used later when assigning each phone to be a subscriber and transmitter to that page group. In the section outlined below.

Also to note make sure that if you have each phone a member of group 1, make sure the exact same fields have the same entry data in each of the phones otherwise it **WILL NOT WORK**.

Subscribe Sets to Groups

The next step in the SIP PS is to Scroll down to the following section of User → Call Services → Paging Group Memberships as shown below. There you will enable the phone to be a member of each of the paging groups and selecting which group membership you'd like it to belong to. See Image below



References

Metaswitch HPBX Scenario: Paging Groups

<https://communities.metaswitch.com/docs/DOC-38526>

Metaswitch Understanding SIP PS configuration

<https://communities.metaswitch.com/docs/DOC-14632>

IANA registered and assigned Multicast IP Addresses

<http://www.iana.org/assignments/multicast-addresses/multicast-addresses.xml>

7 Managing Short Codes

7.1 Viewing Short Codes

The Short Codes page displays all of the Short Codes in your department.

Figure 34: CommPortal Business Group Admin Short Codes display

Joanna Price

Short Codes in Department:

Short codes allow your users to quickly dial common numbers. The table below shows the short codes currently in operation in the selected department.

<input type="checkbox"/>	Short Code	Telephone Number or Service Access Code	Department
<input type="checkbox"/>	300	(555) 729 3000	MetaSwitch
<input type="checkbox"/>	301	(555) 781 2789	MetaSwitch
<input type="checkbox"/>	400	420	Support
<input type="checkbox"/>	400	420	Support
<input type="checkbox"/>	401	320	MetaSwitch
<input type="checkbox"/>	700 - 770	(555) 100 7608 - (555) 100 7678	MetaSwitch

Move selected to:

To view Short Codes in sub-departments, select the sub-department from the drop-down list at the top of the page.

To view all of the Short Codes for all departments, select *View All* from the department drop-down list.

7.2 Moving Short Codes to another department

To move Short Codes between departments, follow these steps:

1. Select the Short Code or Short Code range using the checkbox to the left of the Short Code or Short Code range.
2. Select the department you wish to move the Short Code or Short Code range to using the drop-down list at the bottom of the page.
3. Click on the *Move* button.

7.3 Adding Short Codes

To create a new Short Code, follow these steps:

1. Click on *Add*.
2. Enter the number of the Short Code to add.
3. Enter the telephone number or internal code the Short Code should dial.
4. Click on *Add*.

Figure 35: Add Single Short Code dialog box

Add Single Short Code
Enter the code and (optionally) either the telephone number or the internal code that it maps to, and then click Add

Short Code:

Maps to: Telephone Number
 Internal Code

Telephone Number:

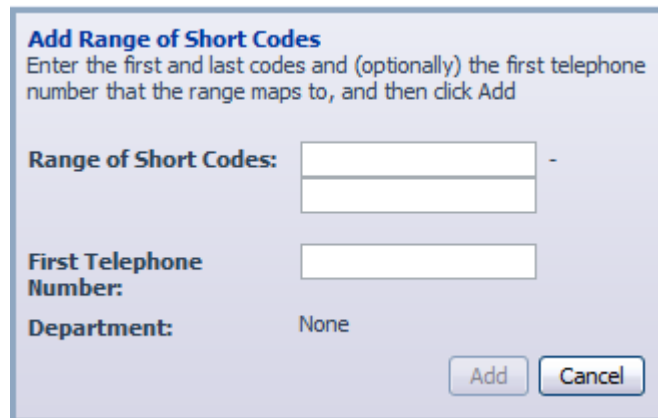
Department: None

7.4 Adding Short Code ranges

To create a new Short Code range, follow these steps:

1. Click on *Add Range*.
2. Enter the first and last numbers of the Short Code range to add.
3. Enter the telephone number or internal code the first Short Code in the range should dial. Then enter the telephone number or internal code for the last Short Code in the range.
4. Click on *Add*.

Figure 36: Add Range of Short Codes dialog box



Add Range of Short Codes
Enter the first and last codes and (optionally) the first telephone number that the range maps to, and then click Add

Range of Short Codes: -

First Telephone Number:

Department: None

7.5 Deleting Short Codes and Short Code ranges

To delete Short Codes and Short Code ranges, follow these steps:

1. Select the Short Code or Short Code range using the checkbox to the left of the Short Code or Short Code range.
2. Click on the *Remove Selected* button.

7.6 Modifying Short Codes

To modify an existing Short Code, follow these steps:

1. Click on either the Short Code number or the number the Short Code dials.
2. Modify the details.
3. Click on *Save*.

Figure 37 : Edit Single Short Code dialog box



Edit Single Short Code
To edit this mapping, enter new short code and/or telephone number values and click Save

Short Code:

Telephone Number:

Department: None

7.7 Modifying Short Code ranges

To modify an existing Short Code range, follow these steps:

1. Click on either the Short Code range numbers or the numbers the Short Code range dials.
2. Modify the details.
3. Click on *Save*.

Figure 38 : Edit Range of Short Codes dialog box



Edit Range of Short Codes
To edit this mapping, enter new short codes and/or telephone number values and click Save

Range of Short Codes: -

First Telephone Number:

Department: None

8 Managing Extensions

8.1 Viewing Extensions

The Extensions page displays all of the Extensions in your business.

Figure 39: CommPortal Business Group Admin Extensions display



8.2 Adding Extensions

To create a new Extension, follow these steps:

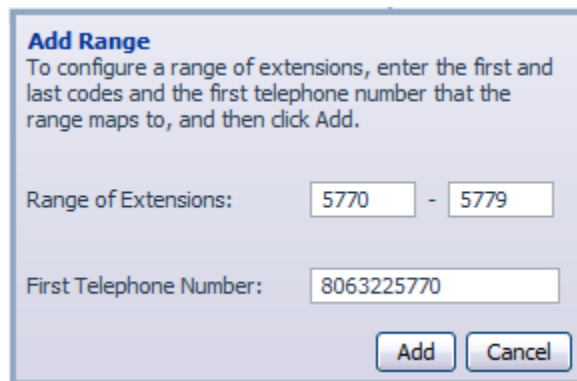
1. Click on *Add*.
2. Enter the number of the Extension to add.
3. Enter the telephone number of the line in your business that this Extension should map to.
4. Click on *Add*.

8.3 Adding Extension ranges

To create a new Extension range, follow these steps:

1. Click on *Add Range*.
2. Enter the first and last Extension numbers to add.
3. Enter the telephone number of first line in your business that this Extension range should map to.
4. Click on *Add*.

Figure 40: Add Extension Range dialog box



Add Range
To configure a range of extensions, enter the first and last codes and the first telephone number that the range maps to, and then click Add.

Range of Extensions: 5770 - 5779

First Telephone Number: 8063225770

Add Cancel

8.4 Deleting Extensions and Extension ranges

To delete Extensions and Extension ranges, follow these steps:

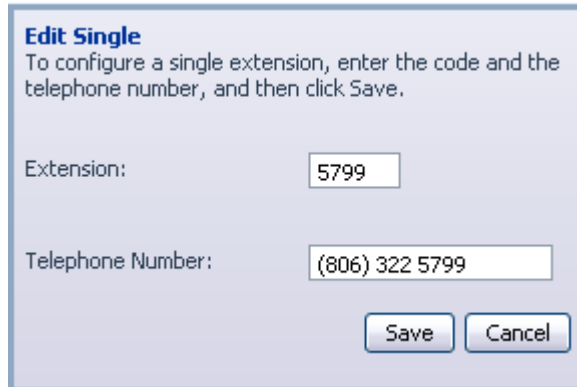
1. Select the Extension or Extension range using the checkbox to the left of the Extension or Extension range.
2. Click on the *Remove Selected* button.

8.5 Modifying Extensions

To modify an existing Extension, follow these steps:

1. Click on either the Extension number or the phone number of the Extension.
2. Modify the details.
3. Click on *Save*.

Figure 41: Edit Single Extension dialog box



Edit Single
To configure a single extension, enter the code and the telephone number, and then click Save.

Extension:

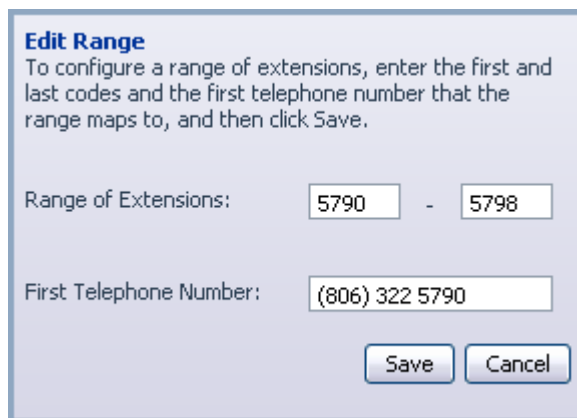
Telephone Number:

8.6 Modifying Extension ranges

To modify an existing Extension range, follow these steps:

1. Click on either the Extension range numbers or the phone numbers the Extension range dials.
2. Modify the details.
3. Click on *Save*.

Figure 42: Edit Extension Range dialog box



Edit Range
To configure a range of extensions, enter the first and last codes and the first telephone number that the range maps to, and then click Save.

Range of Extensions: -

First Telephone Number:

9 Managing Account Codes

9.1 Viewing and modifying account code settings

The Account Codes page displays all of your business's account code settings.

Figure 43: CommPortal Business Group Admin Account Codes display

Joanna Price Account Codes

The following codes are available on all lines when account codes are validated. Individual lines may also have additional codes.

Account Code Options	Assigned Account Codes						
<p>Call types requiring an account code</p> <p><input type="checkbox"/> International <input type="checkbox"/> National <input type="checkbox"/> Local Business Group</p> <p><input checked="" type="checkbox"/> Local <input type="checkbox"/> Operator</p> <p><input checked="" type="checkbox"/> Premium Rate <input type="checkbox"/> Directory <input checked="" type="checkbox"/> Other Business Group</p> <p><input type="checkbox"/> Regional <input type="checkbox"/> Carrier Dialed</p> <p>Use validated account codes by default: <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>Account code length: <input type="text" value="4"/></p> <p>Max incorrect attempts before account blocked: <input type="text" value="10"/></p> <p><input checked="" type="checkbox"/> Call types may be overridden per line</p> <p><input checked="" type="checkbox"/> Account code length may be overridden per line</p> <p><input type="checkbox"/> Lines may view business group account codes</p> <p>Lines <input type="text" value="can view and change"/> their own validated account codes.</p>	<table border="1"> <tbody> <tr> <td>0173</td> <td>GRMarketing</td> </tr> <tr> <td>1534</td> <td>GRAccounts</td> </tr> <tr> <td>2342</td> <td>gRSales</td> </tr> </tbody> </table>	0173	GRMarketing	1534	GRAccounts	2342	gRSales
0173	GRMarketing						
1534	GRAccounts						
2342	gRSales						

Buttons: Edit List, Apply, Cancel

9.2 Modifying settings

9.2.1 Modifying call types requiring account codes

Use the checkboxes to specify which types of calls will require account codes:

International – Whether account codes are required for calling international numbers.

Local – Whether account codes are required for local calls.

Premium Rate – Whether account codes are required for premium rate (1-900 number) calls.

Regional – Whether account codes are required for regional calls.

National – Whether account codes are required for long distance calls.

Mobile (only available in areas which are not part of the North American Numbering Plan (NANP)) – Whether account codes are required for mobile calls.

Operator – Whether account codes are required for operator calls.

Directory – Whether account codes are required for directory (411) calls.

Carrier Dialed – Whether account codes are required to make calls when dialing a carrier code (such as 1010000).

Local Business Group – Whether account codes are required for local calls to other numbers within your business. Normally calls within your business will be local calls, but if you have multiple sites calls between numbers may be regional or national calls. In this case you need to use the Other Business Group setting.

Other Business Group – Whether account codes are required for non-local calls to other numbers within your business

Note: You cannot require an account code for emergency calls, toll-free calls, or calls to service access codes.

Once you have selected the call types, click *Apply* to save your changes.

9.2.2 Choosing Validated or Non-validated Account Codes

To use Validated Account Codes, follow these steps:

1. Check *Yes* after *User validated account codes*.
2. Click *Apply*.

To use Non-validated Account Codes, follow these steps:

1. Check *No* after *User validated account codes*.
2. Click *Apply*.

9.2.3 Setting account code length

To specify the length that should be used by your account codes, follow these steps:

1. Enter the length in the text box after *Account code length*.
2. Click *Apply*.

9.2.4 Blocking access after incorrect account codes

If you are using Validated Account Codes, a user's phone line will be blocked after an incorrect account code is entered too many times in succession. To change the number of incorrect entries the user is allowed, follow these steps:

1. Enter the value in the text box after *Max incorrect attempts before account is blocked*.
2. Click *Apply*.

9.2.5 Setting individual line properties

To specify whether various settings can also be specified for each line in your business, perform one of the following operations.

To allow which types of calls require account codes to be changed for each line, check *Call types may be overridden per line*.

To allow the length of account codes to be changed for each line, check *Account code length may be overridden per line*.

To allow lines to view the account codes that you have defined for the whole business, check *Lines may view business group account codes*.

Set whether each line should be able to view, or both view and change, or not view their own account codes by selecting the relevant setting from the dropdown list at the bottom of the Account Code Options section.

If you want to have per line account codes, but don't want the user to be able to configure these, configure these by logging on to CommPortal as that user. This is described in Section 9.3. Once you have made your changes, click *Apply* to save them.

9.2.6 Configuring account codes

To modify the account codes, follow these steps:

1. Click on *Edit List*.

To add an account code, follow these steps:

- a. Enter the code in the *Account code* text box.
 - b. Enter the description in the *Description* text box.
 - c. Click on *Add*.
2. To remove an account code, click the trash can icon to the right of the account code.
 3. To change the description of an account code, remove it and then re-add it with the new description.
 4. Once you have finished making changes, click on *OK*.
 5. To save your changes you must now click *Apply*.

Figure 44: Manage Assigned Account Codes dialog box

Account code:	Description:	
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>
7777	Sales	<input type="button" value="X"/>
8888	Accounts	<input type="button" value="X"/>

Clear List OK Cancel

9.3 Viewing and modifying account code settings for a line

If you want to view or change a particular line's account code settings, follow these steps:

1. Change the settings to allow you to do this as described in Section 9.2.5.
2. Go to the Lines page in CommPortal and log in as the line whose settings you wish to change, as described in Section 3.3.
3. Once you have logged in as this user, follow the instructions for modifying account codes in *Metaswitch Hosted PBX End User Guide*.

9.4 Viewing Business Group Call Logs

The Call Logs page enables Business Group Administrators with the appropriate permissions to access Business Group Call Logs. The Call Logs menu button is only available if the associated MetaSphere CFS has Business Group Call Logs enabled.

The BG Administrator can click on the Call Logs menu button to launch a new page that allows them to export call logs for their Business Group fragment, and any departments under their control within their Business Group fragment, including.

Request a report containing the logs of all calls made (up to a month at a time) to and from lines within their administration domain (whole business group or department and sub-departments)

Filter call logs specifying a date range, and/or by department domain if the Business Group has them.

Error messages are displayed if any of these filters are set to incorrect values. The UI will validate these filters once the *Download* button is clicked, and then display a dialog box while the report downloads. The BG Admin cannot access the main page or navigate to another page during this process, although they can cancel the operation.

These call logs can then be imported into other programs, for example Microsoft Excel. When using Microsoft Excel, the BG Admin should use the Import Data menu option and change the data format of all telephone number columns to text to ensure that the telephone numbers in the call logs are displayed correctly.

To download call logs follow these steps:

From the BG Admin page select the *Call Logs* link from the left of the page and the following appears.

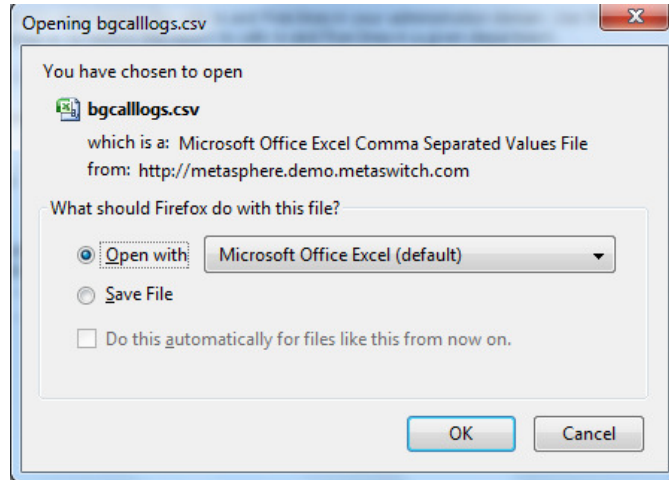
Figure 45: CommPortal Business Group Admin Call Logs display

The screenshot displays the 'Call Logs' interface for a user named Joanna Price. The page title is 'Call Logs'. Below the title, there is a brief instruction: 'Call Logs are presented in a CSV report listing the calls to and from lines in your administration domain. Use the filtering options to specify a date range or to restrict the report to calls to and from lines in a given department.' The main content area is titled 'Filter configuration' and contains two sections. The first section prompts the user to 'Enter start and end dates to request logs of calls made within a specific period of time:' and provides input fields for 'Start date:' and 'End date:', each with sub-fields for 'month', 'day', and 'year', and a calendar icon. The second section prompts the user to 'Select the department whose calls should be included in the report. Note that the report will include calls to and from lines in the selected department and its sub-departments.' and includes a dropdown menu. A 'Download' button is located at the bottom right of the main content area.

Enter the time frame (up to 30 days) and the department for the call logs that you would like to see.

Click the *Download* button. After the report is generated, the following appears.

Figure 46: Call log download dialog box

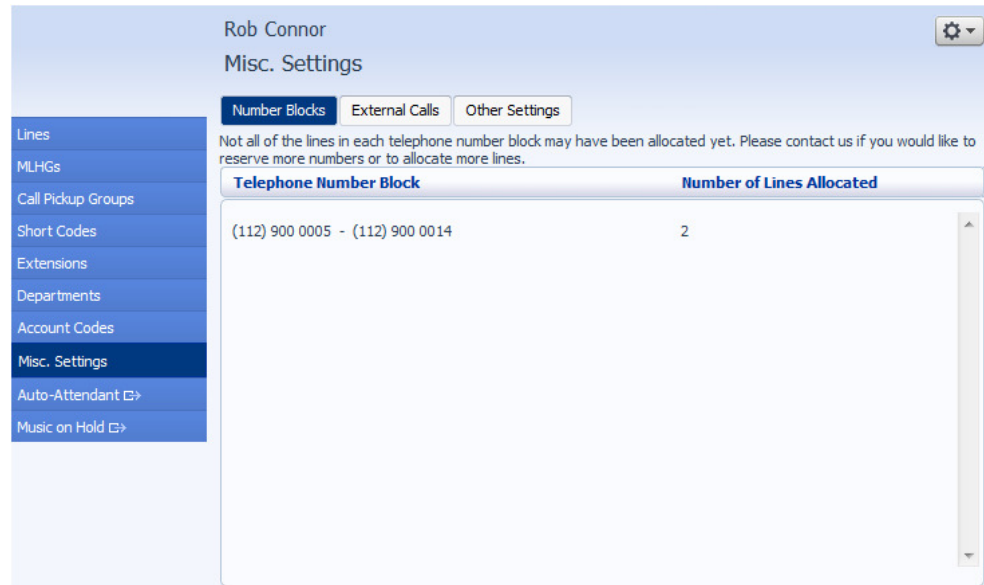


Select the program to open the file or select save file.

10 Viewing miscellaneous settings

The Misc. Settings page allows you to view and change a number of settings associated with your Business Group.

Figure 47: CommPortal Business Group Admin Number Misc. Settings display



It includes the following tabs.

Number Blocks, described in section 10.1.

External Calls, described in section 10.2.

Other Settings, described in section 10.3.

10.1 Viewing Number Block settings

The Number Blocks tab displays all of the telephone numbers which we have assigned to your business.

10.2 Viewing External Call Settings

The External Calls tab lets you view the settings that are in place for calls that are external to your business.

External Calls – This can take one of the following values:

- Not Permitted – Calls outside of your business are not permitted.
- Unlimited – There is no explicit limit to the number of concurrent external calls you can have, but there may be a limit to either the number of Incoming or Outgoing Calls you can make.
- Limited – There is a limit to the number of concurrent calls you can have to outside of your business.
- Maximum number of external calls – If the value of External Calls is Limited, the value of this setting specifies how many concurrent external calls there may be at any time.

Incoming Calls – This can take one of the following values:

- Not Permitted – Inbound calls from outside of your business are not permitted.
- Unlimited – There is no limit to the number of concurrent incoming external calls you can have, although you are still subject to any Maximum number of external calls.
- Limited – There is a limit to the number of concurrent calls you can have from outside of your business.
- Maximum number of simultaneous incoming calls – If the value of Incoming Calls is Limited, the value of this setting specifies how many concurrent incoming external calls there may be at any time.

Outgoing Calls – This can take one of the following values:

- Not Permitted – Outgoing calls to outside your business are not permitted.
- Unlimited – There is no limit to the number of concurrent outgoing external calls you can have, although you are still subject to any Maximum number of external calls.
- Limited – There is a limit to the number of concurrent calls you can have to outside of your business.
- Maximum number of simultaneous outgoing calls – If the value of Outgoing Calls is Limited, the value of this setting specifies how many concurrent incoming external calls there may be at any time.
- Local carrier code – This is a code that identifies which carrier will be used for any local calls your business makes. It is sometimes called PIC2.

- Long distance carrier code – This is a code that identifies which carrier will be used for any long distance calls your business makes. It is sometimes called PIC1.
- International carrier code – This is a code that identifies which carrier will be used for any international calls your business makes. It is sometimes called PIC3.

10.3 Viewing Other Settings

The Other Settings tab lets you view settings for Restricted Subscriber Messaging, the Internal Operator Number, and internal extensions.

Restricted Subscriber Messaging – This determines whether members of this Business Group can send messages only to other members of the same Business Group.

Use Internal extensions – This determines whether or not CommPortal displays the Business Group extension number associated with a directory number where possible.

Internal operator number – This determines the number used to access this Business Group's operator.

11 Auto-Attendant – Easy / Premium Attendant

11.1 Overview

MetaSphere provides two solutions for Auto Attendant functionality. Easy Attendant offers a very simple automated telephone menu. Callers to a business are directed to the automated TUI, providing key options to transfer to specific departments or individuals in the business, to transfer to a voicemail account directly, or to listen to a recorded announcement. You can choose to have either a single menu that plays when Easy Attendant is turned on, or two different menus for business and non-business hours that are used according to a pre-defined schedule. When Easy Attendant is turned off, you can either forward callers to another telephone number or play a message informing the caller that your business is currently closed.

Premium Attendant, aimed at small and medium business subscribers, offers an increased level of service compared to Easy Attendant. In addition to all the features offered by Easy Attendant, Premium Attendant allows multiple menus with a finer scheduling control. It also includes more call handling options, such as Voicemail by Name and Voicemail by Extension, as well as greater control over the actions taken for any given key press.

11.2 Easy Attendant

This section outlines the required steps for configuring Easy Attendant.

11.2.1 Planning your Easy Attendant

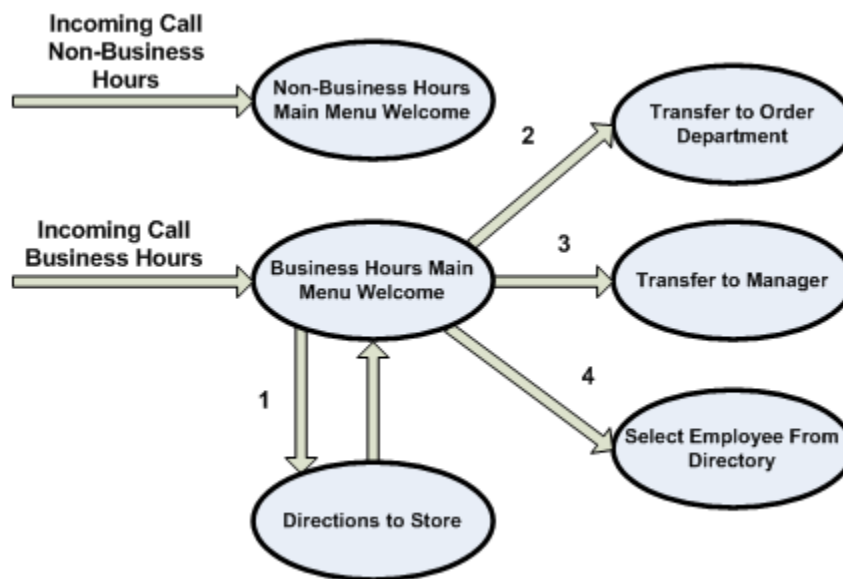
Before you start to set up your Easy Attendant, it is a good idea to sketch out the operation of each menu on paper. This allows you to plan what options you need from the menu and how each one will operate.

For example, the main menu for a pizza company may need to include the following options:

1. Play an announcement giving directions to the store, then return to the main menu so that the user can select another option.
2. Place an order with a server.
3. Speak to the manager.
4. Speak to another employee using dial-by-name.

The diagram below shows how this menu would operate, including the key presses to access each option:

Figure 48: Easy Attendant call handling example



In the diagram, option 1 (directions to the store) is shown with an arrow returning to the main Welcome menu so that the caller can select another option if required. This is because this option is playing a recording. The other options do not allow the return to the menu.

For out-of-hours and holiday operation, the Auto Attendant may provide an announcement that the store is closed (without allowing the caller to select any options), or it may provide an alternative set of menu options.

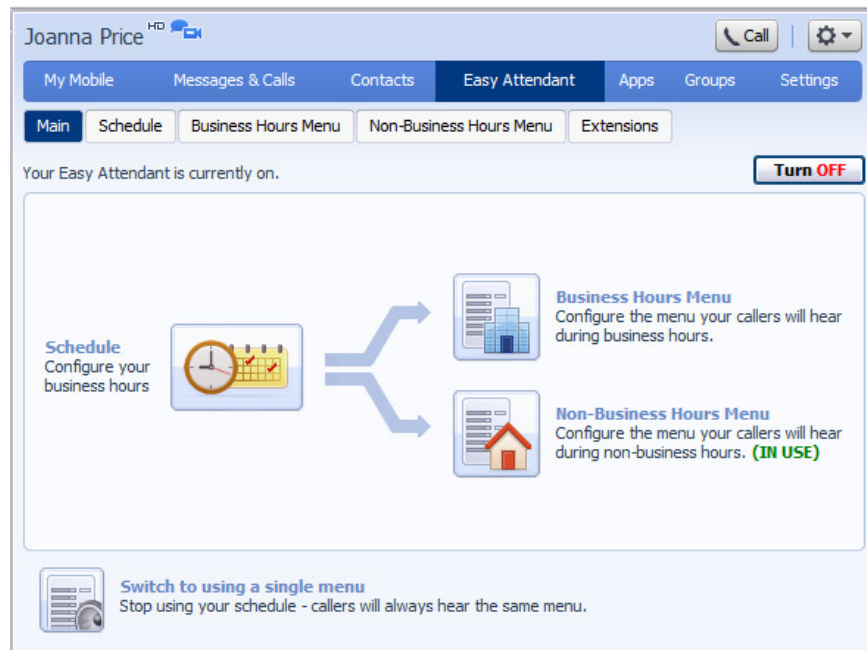
11.2.2 Configuring Easy Attendant

To configure your Easy Attendant log into the Auto-Attendant, following these steps:

From the BG Administrator portal, select *Lines* and then click the *Individual Line* icon on the far right side of the page. As an alternative, you can access the CommPortal user login screen and enter the Easy Attendant Number and Password

The Screen then displays the Easy Attendant portal.

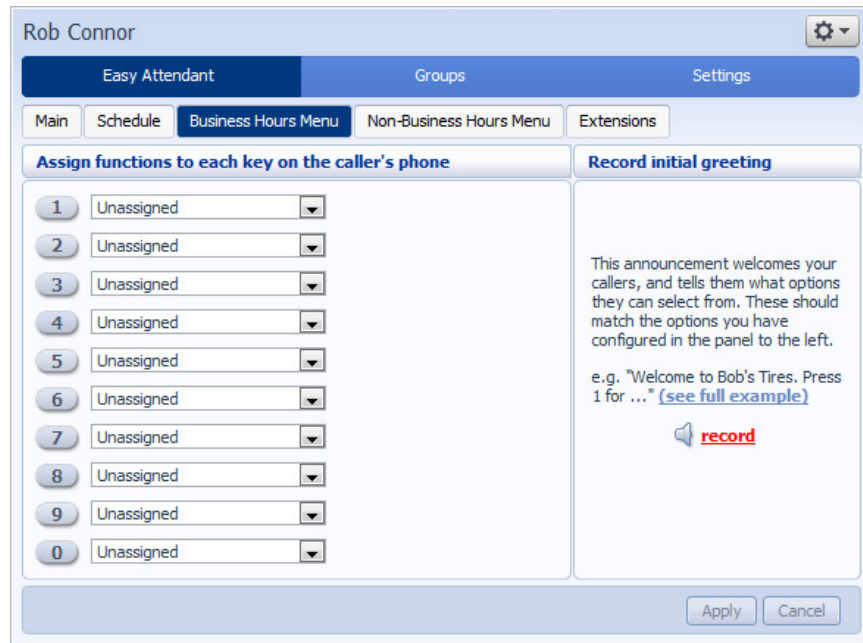
Figure 49: Easy Attendant Portal



Begin configuring your Auto-Attendant by selecting either a single menu or a scheduled menu for business hours and non-business hours

If using a scheduled menu, begin setting up your Easy Attendant by recording the initial greeting by selecting the *listen/change* option on the lower right of the screen.

Figure 50: Recording an initial greeting



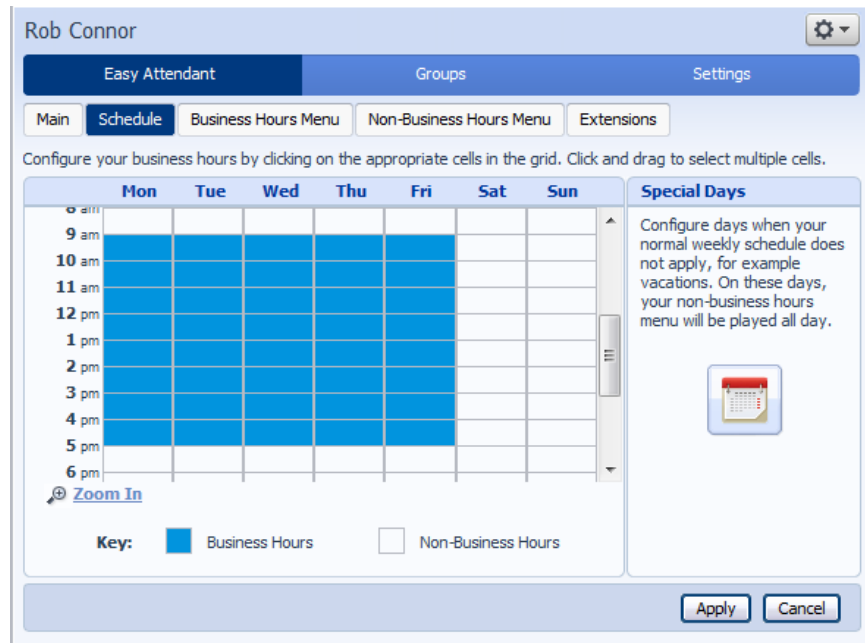
Now you are ready to define the specific menu items as defined in your plan to one of the following options.

1. Play Announcement
2. Transfer to Phone
3. Transfer to Voicemail
4. Dial by Extension
5. Dial by Name

Repeat steps 4 and 5 above for the Non-Business Hours menu.

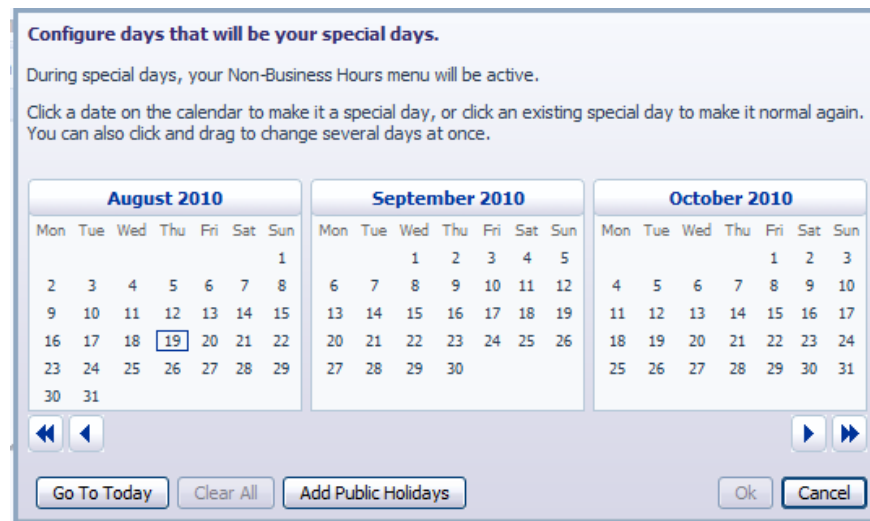
Next you will need to establish your working hours by selecting the *Schedule* tab. Once in the Schedule screen, click on the *Business Hours* key and then click in the calendar and while holding down the left mouse button drag the mouse across the calendar to indicate the business hours. In the example below, the business hours are Monday – Friday from 9:00 am until 5:00 pm. Any other time are considered non-working hours.

Figure 51: Easy Attendant Schedule tab



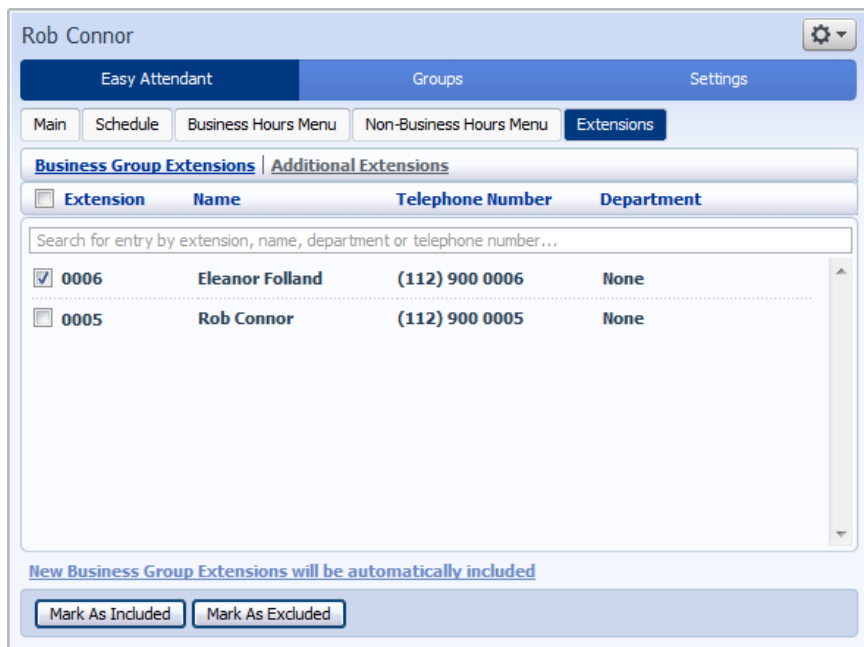
Next you will need to select any non-working days such as holidays by clicking on the calendar icon in the Special Days section of the Schedule page. You can choose individual non-working days by clicking on the date in the calendar, or you can use the *Choose Public Holidays* option to automatically add public holidays for your region.

Figure 52: Special Days



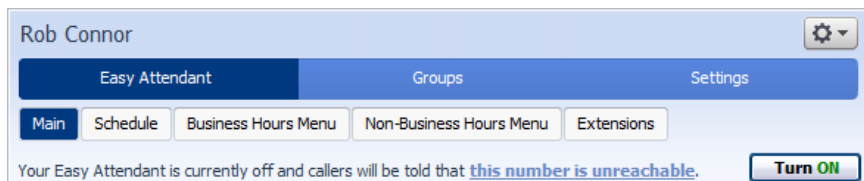
If you will be using "Dial by Name", then you will need to define which extensions will participate in dial by name and record the names of users in the extensions tab. To include or exclude and extension from dial by name, select the extensions as shown below and then click either *Mark as Included* or *Mark as Excluded*. To record the user's name click on the record link for the user.

Figure 53: Easy Attendant Extensions tab



The final step in this process is to activate you Easy Attendant by clicking the *Turn On* button from the Main Tab. Your Easy Attendant is now active.

Figure 54: Turn Easy Attendant On button



11.3 Premium Attendant

This section outlines the required steps for configuring the Premium Attendant.

11.3.1 Planning your Premium Attendant

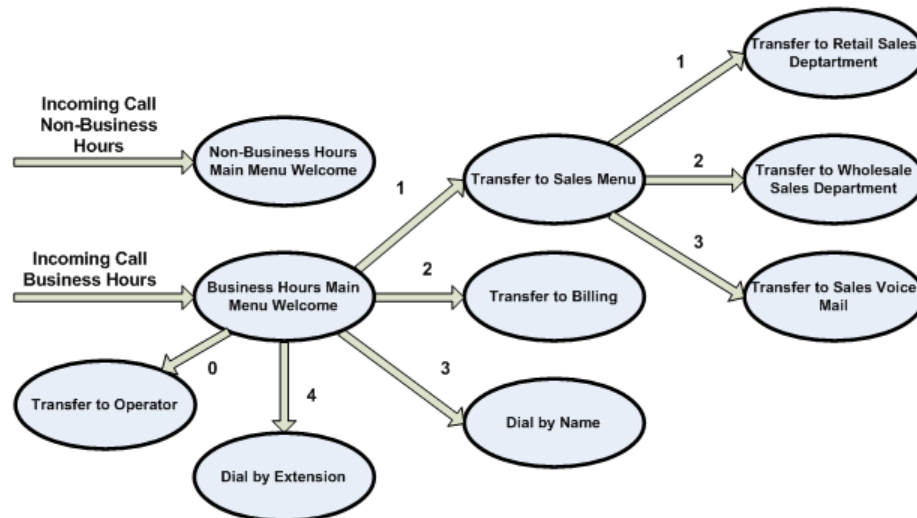
Before you start to set up your Premium Attendant, it is a good idea to sketch out the operation of each menu on paper. This allows you to plan what options you need from the menu and how each one will operate.

For example, the main menu for a sales company may include the following options:

1. Have a schedule Attendant.
2. Provide a main menu for business hours that provides the companies default greeting and menu.
3. Have the ability to transfer to a sales menu that provides additional menu options.
4. Transfer to speak with the Billing department.
5. Dial by name.
6. Dial by extension.
7. Transfer to an operator.

The sketch below shows how this menu would operate, including the key presses to access each option:

Figure 55: Premium Attendant call handling example



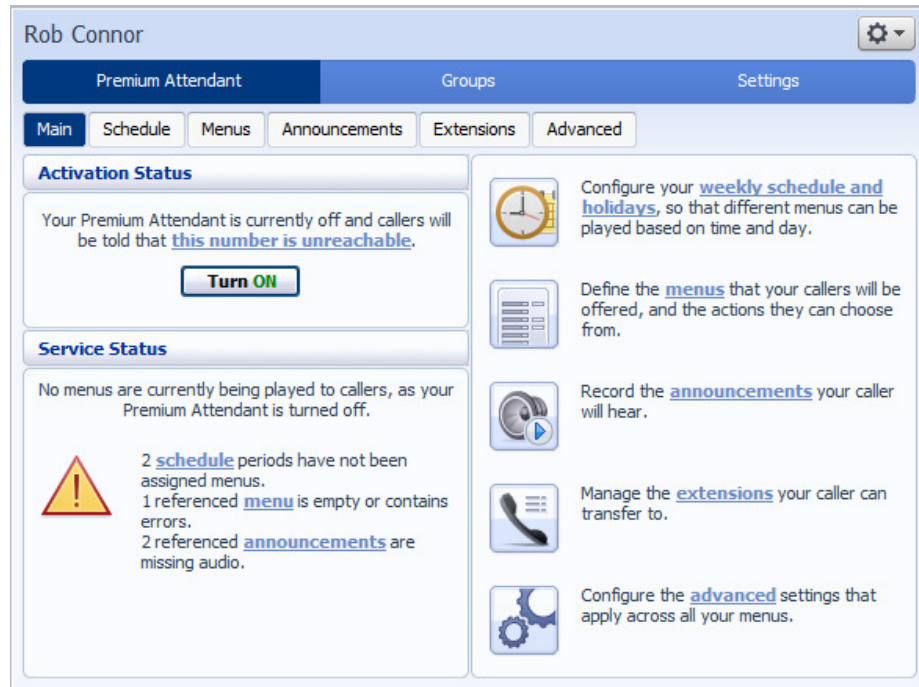
For out-of-hours and holiday operation, the Auto Attendant may provide an announcement that the store is closed (without allowing the caller to select any options), or it may provide an alternative set of menu options.

11.3.2 Logging into Premium Attendant

To configure your Premium Attendant log into the Auto-Attendant, following these steps:

From the BG Administrator portal, select *Lines* and then click the *Individual Line icon* on the far right side of the page. As an alternative, you can access the CommPortal user login screen and enter the Premium Attendant Number and Password. The screen then displays the Premium Attendant portal.

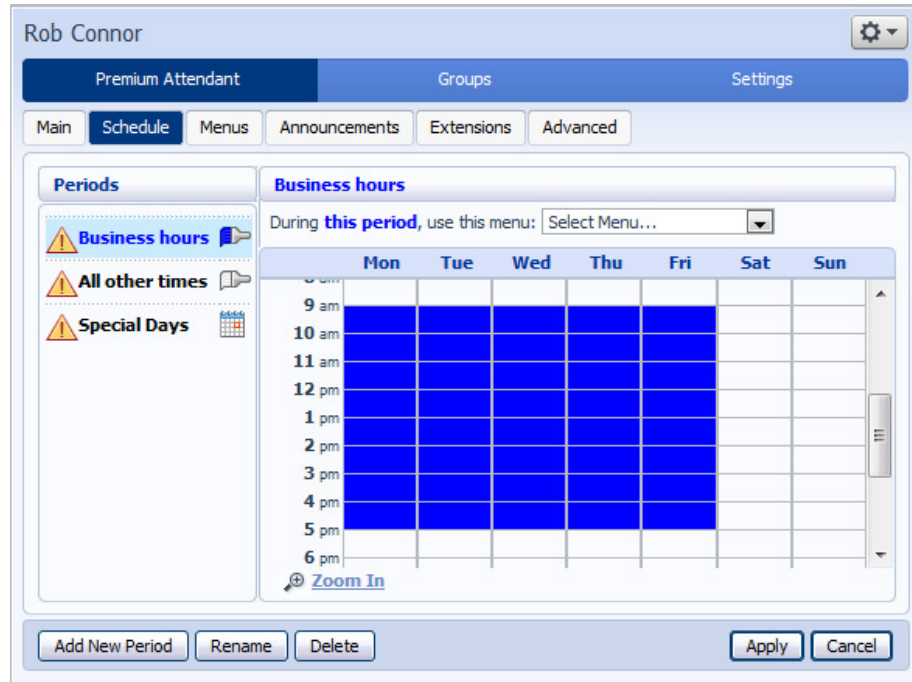
Figure 56: Premium Attendant Portal



11.3.3 Configuring Premium Attendant Schedule

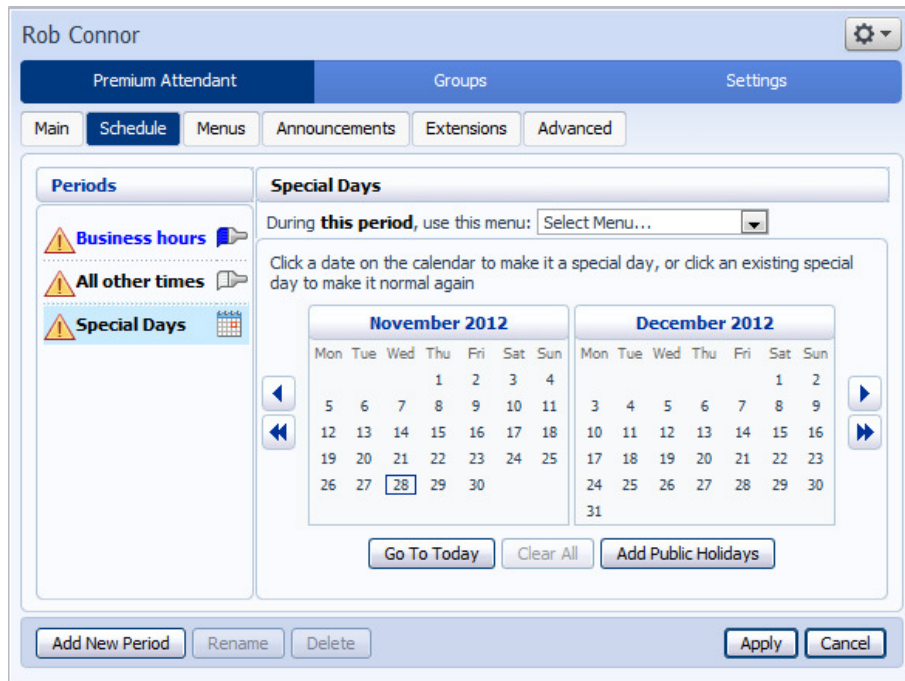
You can configure your weekly schedule by clicking on the *Weekly Schedule and Holidays* icon. Once in the Schedule screen, click on the *Business Hours* key and then click in the calendar and, while holding down the left mouse button, drag the mouse across the calendar to indicate the business hours. In the example below, the business hours are Monday – Friday from 9:00 am until 5:00 pm. Any other time are considered non-working hours.

Figure 57: Premium Attendant Schedule tab



Next you will need to select any non-working days such as holidays by clicking on the calendar icon in the Periods section of the Schedule page. You can choose individual non-working days by clicking on the date in the calendar, or you can use the *Choose Public Holidays* option to automatically add public holidays for your region.

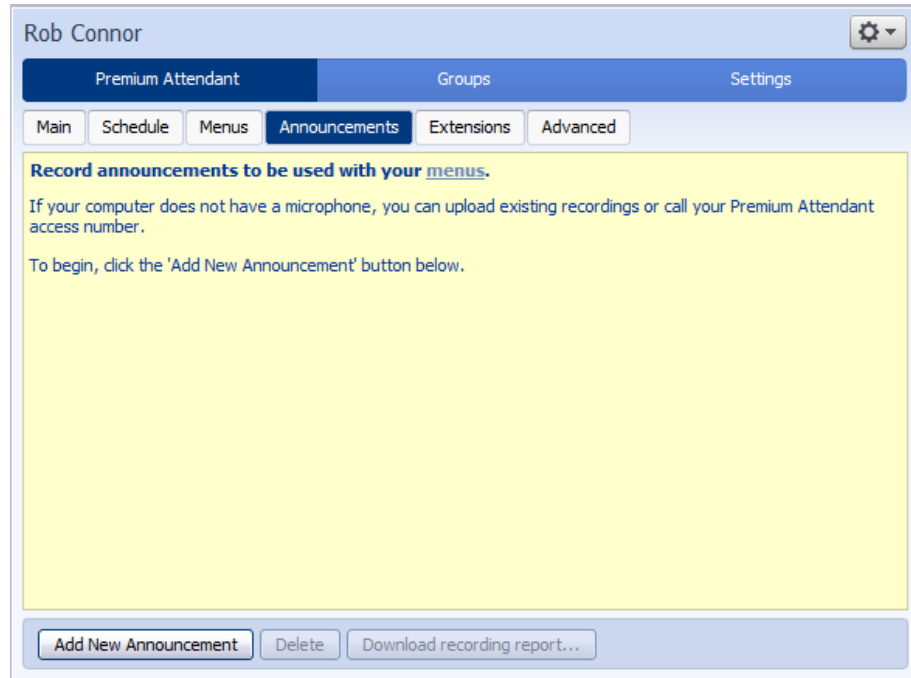
Figure 58: Premium Attendant Special Days



11.3.4 Configuring Premium Attendant Announcements

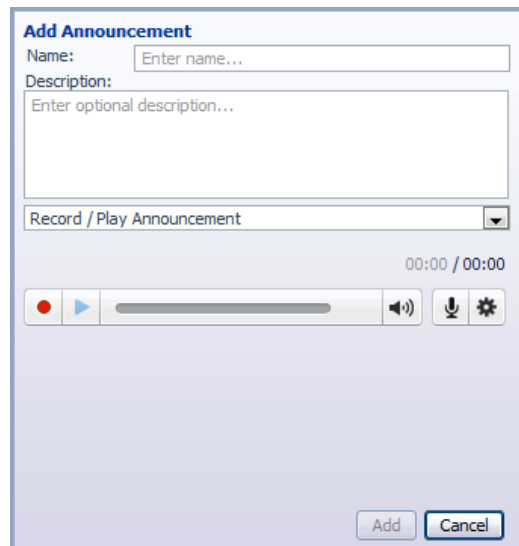
In order to use your Premium Attendant you will need to record the announcements that will be played as either your primary Business Hours or Non-Business Hours greeting as well as any other recorded announcements required. The example in section 11.3.1 would require three announcements, one each for Business Hours, Non-Business hours and the Sales menu. Click in the Announcements tab to begin configuration.

Figure 59: Premium Attendant Announcements tab



Click the *Add New Announcement* button and then follow the steps below.

Figure 60: Add Announcement



1. Enter the name and description of your announcement.
2. To record your announcement using a microphone or headset connected to your computer, click the red record button.
3. When you have finished recording, press the stop button and click on the *Add* button at the bottom of the interface.

To upload pre-recorded announcements, select *Upload Announcement* from the drop-down menu and browse to the location of your announcement and click upload. After your upload has completed click the *Add* button.

Figure 61: Uploading an Announcement

The screenshot shows a dialog box titled "Add Announcement". It has the following elements:

- Name:** A text input field with the placeholder text "Enter name...".
- Description:** A larger text input area with the placeholder text "Enter optional description...".
- Upload announcement:** A dropdown menu currently showing "Upload announcement".
- Instructions:** Text below the dropdown: "Record your announcement as a G.711 (CCITT) 8 kHz 8 Bit Mono u-Law WAV file and then upload it below."
- New file:** A text input field followed by a "Browse..." button.
- Current file:** The text "No file currently uploaded".
- Buttons:** At the bottom, there are two pairs of buttons: "Cancel" and "Upload" (highlighted in blue), and "Add" and "Cancel" (highlighted in blue).

To record the announcement using your telephone, do the following.

1. Create the announcement by adding a name and description and selecting *Record By Phone* from the drop-down menu.
2. Make a note of the announcement number and then click on the *Add* button.
3. Dial the main number for your Premium Attendant service provided by your service provider, enter the number for your Premium Attendant, enter the pin and then follow the prompts to record your announcement using the announcement number noted in the previous step.

Figure 62: Recording Announcements by Phone

Add Announcement

Name:

Description:

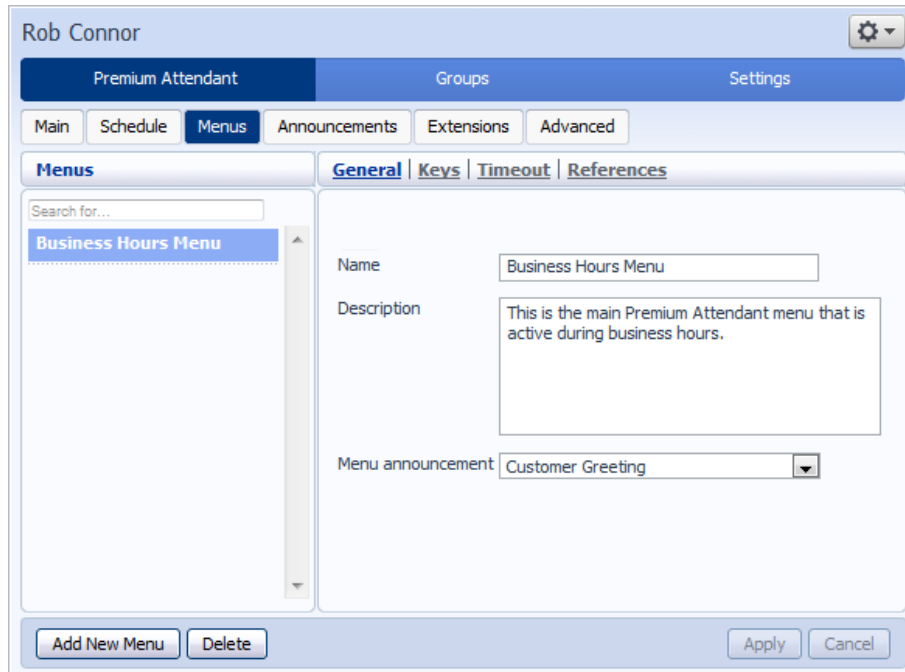
Record by Phone

To record this announcement, dial your Premium Attendant access number, and follow the prompts to edit announcements. Enter the announcement number **101** when prompted.

11.3.5 Configuring Premium Attendant Menu

Next you will need to set up your Premium Attendant menu options. By default, there are two menus defined in Premium Attendant. These could be used as your main business hours menu and your main non-business hours menu. You can add additional menus as required by clicking the *Add* button.

Figure 63: Premium Attendant Menus tab



Begin to configure your menu by providing a name and description and selecting the Menu announcement to be used by this menu, and then click *Apply*.

Next you will need to configure the action for each key pressed for your menu by selecting the *Keys* link and selecting an option using the dropdown menus for each key pressed in the menu. The options available are as follows:

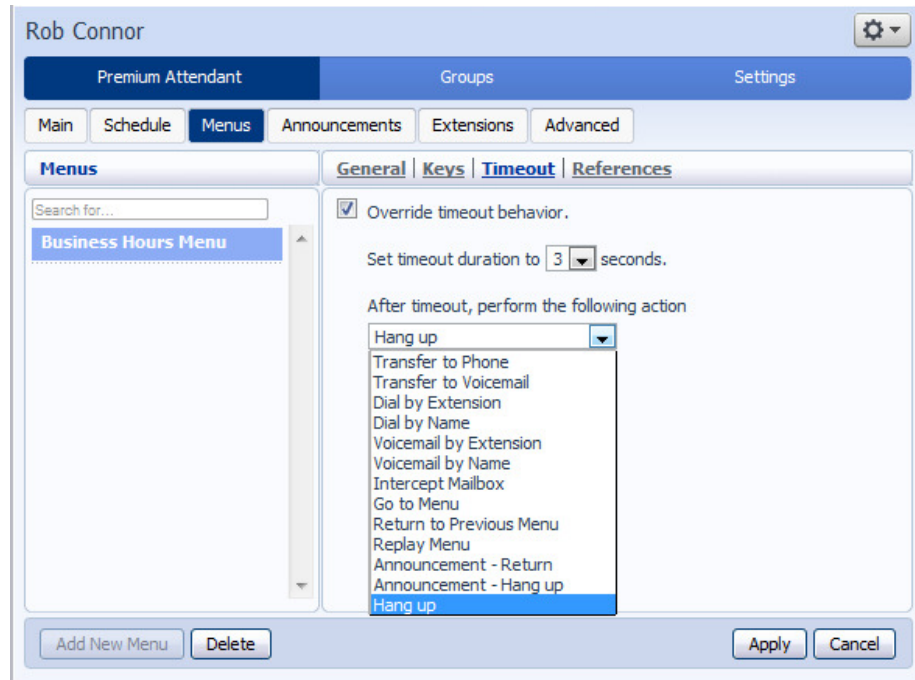
- Use Default (This option is default for all keys for new menus)
- Transfer to Phone
- Transfer to Voicemail (CoS controlled)
- Dial by Extension (CoS controlled including whether an announcement is automatically played giving initial instructions when this key is pressed, or whether these instructions must be recorded by the subscriber in the menu announcement)
- Dial by Name
- Voicemail by Extension (CoS controlled)
- Voicemail by Name (CoS controlled)
- Transfer to Operator (CoS controlled, and only available for Premium Attendants in a Business Group)
- Intercept mailbox (CoS controlled)
- Go to Menu
- Return to Previous Menu
- Replay Menu
- Announcement – Return
- Announcement – Hang up
- Hang up

Figure 64: Premium Attendant key configuration menu

Key	Action	Result
1	Use Default	Do Nothing
2	Use Default	Do Nothing
3	Transfer to Phone	Do Nothing
4	Transfer to Voicemail	Do Nothing
5	Dial by Extension	Do Nothing
6	Dial by Name	Do Nothing
7	Voicemail by Extension	Do Nothing
8	Voicemail by Name	Do Nothing
9	Intercept Mailbox	Do Nothing
0	Go to Menu	Do Nothing
#	Return to Previous Menu	Do Nothing
*	Replay Menu	Do Nothing
	Announcement - Return	Do Nothing
	Announcement - Hang up	Do Nothing
	Hang up	Do Nothing
0	Use Default	Do Nothing
#	Use Default	Replay Menu
*	Use Default	Return to Previous Menu

Next, you will need to configure the timeout behavior of your menu to address callers that do not press a key in this menu. Enter the timeout duration and the timeout behavior from the dropdown list as seen below and click *Apply*.

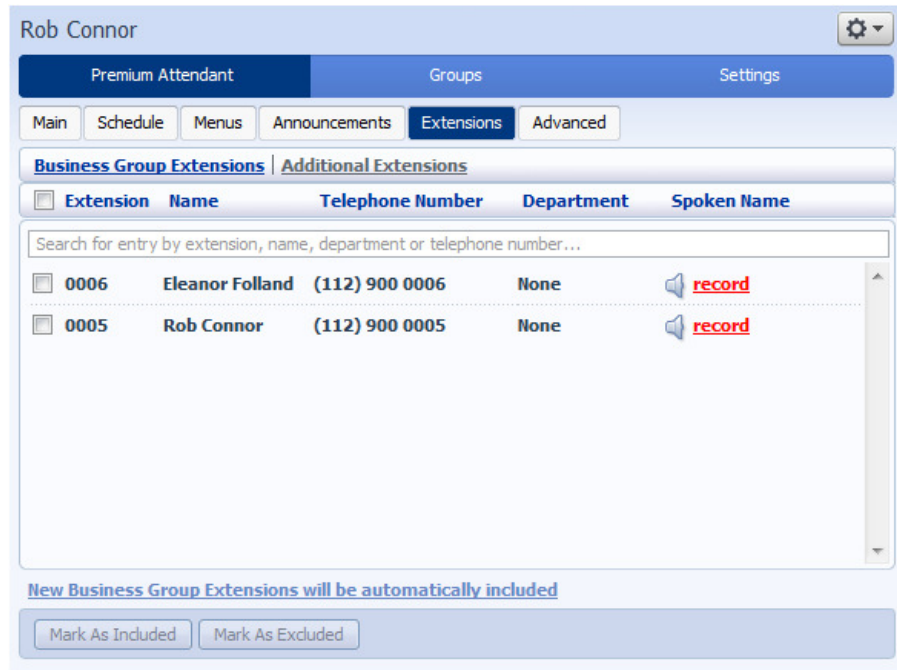
Figure 65: Premium Attendant timeout configuration menu



11.3.6 Configuring Premium Attendant extensions

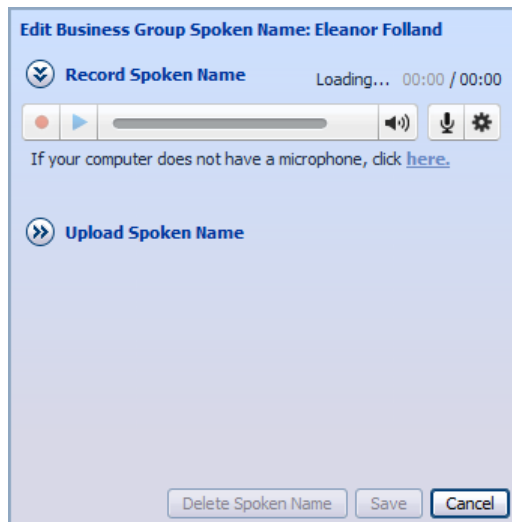
If you plan on using dial by name or dial by extension, you will need to select the extensions and record a name for the dial by name. To start, click the Extensions tab and select the extensions you wish to be added or excluded and click either *Mark as Included* or *Mark as Excluded*.

Figure 66: Premium Attendant Extensions tab



To record names to be used for dial by name, click the listen/change icon and record the name using the recording interface shown below and click the *Save* button.

Figure 67: Business Group Spoken Name Recorder



11.3.7 Configuring Premium Attendant advanced options

In order to configure the advanced settings for your Premium Attendant, click on the *Advanced* tab and define the default handling for each key press. These actions will be available to callers in all menus unless you assign an alternative action to the key in the per menu configuration.

Figure 68: Premium Attendant Advanced Settings tab

The screenshot shows a web interface for configuring a Premium Attendant. At the top, the user's name "Rob Connor" is displayed. Below it are three tabs: "Premium Attendant", "Groups", and "Settings". Under "Premium Attendant", there are sub-tabs: "Main", "Schedule", "Menus", "Announcements", "Extensions", and "Advanced". The "Advanced" tab is selected. Below the sub-tabs are three links: "Default keys", "Error handling", and "Other settings". The "Default keys" link is active. The main content area contains a list of keys (1-9, 0, #, *) and their corresponding actions. All keys from 1 to 9 and 0 are set to "Do Nothing". The # key is set to "Replay Menu" and the * key is set to "Return to Previous Menu". There is explanatory text on the left side of the form: "This page allows you to configure default actions for each key that a caller can press. These actions will be available to callers in all menus unless you assign an alternative action to the key in the per menu configuration." At the bottom right, there are "Apply" and "Cancel" buttons.

Key	Action
1	Do Nothing
2	Do Nothing
3	Do Nothing
4	Do Nothing
5	Do Nothing
6	Do Nothing
7	Do Nothing
8	Do Nothing
9	Do Nothing
0	Do Nothing
#	Replay Menu
*	Return to Previous Menu

Next, click on the *Error Handling* link and set the value and behavior for Timeout, Call Transfers, Unknown Input and Invalid Extensions.

Figure 69: Premium Attendant Error Handling menu

Rob Connor

Premium Attendant Groups Settings

Main Schedule Menus Announcements Extensions **Advanced**

Default keys **Error handling** Other settings

Timeout

Menu time out if a caller doesn't press a key within
3 seconds.

After 3 menu timeouts:
System announcement then hang up

Call Transfer

If a call transfer fails: Hang up the call

Unknown Input

If the caller selects an unassigned key 3 times:
System announcement then hang up

Invalid Extension

If the caller dials an invalid extension 3 times:
Hang up

Apply Cancel



11.3.8 Activating Premium Attendant

Finally, you will need to activate your Premium Attendant by going to the Main page and selecting the Turn On button. The Premium Attendant interface uses the following error messages and icons to alert you to incorrect or missing configuration. These are produced on page load, and are not updated dynamically.

The Main tab has a Service Status panel that states your current schedule period and the menu that callers will hear. It also reports if you have errors in any menus, or one or more announcements is missing audio.

The Schedule and Menus pages use a banner line to report any errors.

The following icons are used to indicate incorrect or incomplete configuration

-  error icon
-  warning icon

If there are any errors in your configuration, you will be warned against turning on Premium Attendant, and in some cases this will be prohibited.

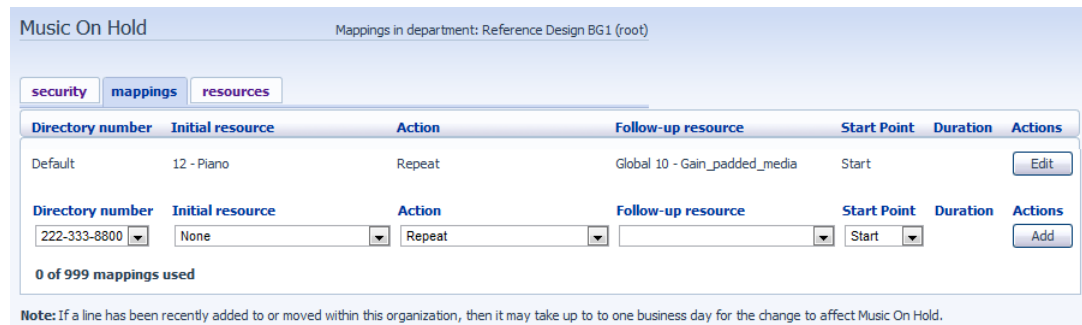
12 Music On Hold

12.1 CommPortal access

12.1.1 Logging in

To log into the Music On Hold system, click the Music On Hold link at the bottom of the left hand side of CommPortal. This opens up a new browser window with the Music On Hold administration system.

Figure 70: Music On Hold administration system



Music On Hold Mappings in department: Reference Design BG1 (root)

security mappings resources

Directory number	Initial resource	Action	Follow-up resource	Start Point	Duration	Actions
Default	12 - Piano	Repeat	Global 10 - Gain_padded_media	Start		Edit
222-333-8800	None	Repeat		Start		Add

0 of 999 mappings used

Note: If a line has been recently added to or moved within this organization, then it may take up to one business day for the change to affect Music On Hold.

If you are the administrator for the top-level department of your business then you will see three links at the top of the page, each taking you to a different section of the Music On Hold administration system.

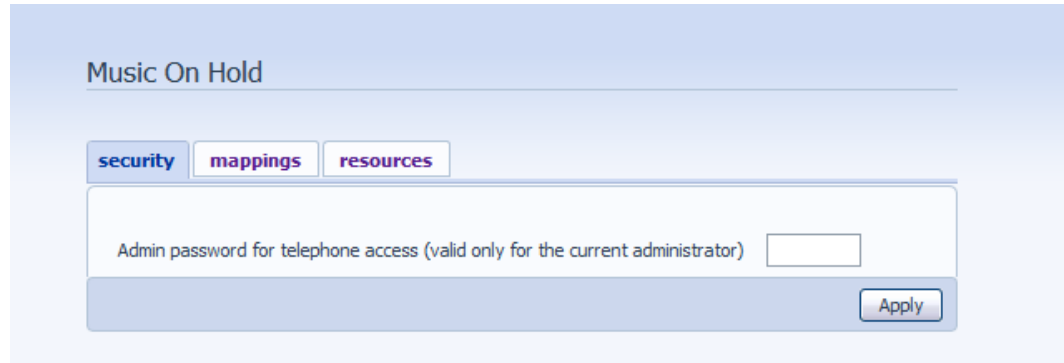
- Security – View and configure your security settings.
- Mappings – This section allows you to configure different recordings to be played when different lines within your business put callers on hold.
- Resources – This section allows you to upload and manage your recordings.

If you are not an administrator for the top-level department of your business you will not see Resources as only administrators for the top-level department can manage recordings.

12.1.2 Viewing and changing your security settings

To view your security settings, select the Security section.

Figure 71: Music On Hold Security section



The screenshot shows a web interface for the 'Music On Hold' system. At the top, the title 'Music On Hold' is displayed. Below the title, there are three tabs: 'security', 'mappings', and 'resources'. The 'security' tab is currently selected. In the main content area, there is a text input field with the label 'Admin password for telephone access (valid only for the current administrator)'. To the right of the input field is an 'Apply' button.

As well as accessing the Music On Hold system using CommPortal, you can also use your phone to access it. Using this page you can view and change the password you will need to enter to use the phone access. To change your password, follow these steps:

1. Enter the new password in the text box.
2. Click *Apply*.

12.1.3 Managing recordings

To access the recordings section, click on the *Resources* link.

Figure 72: Music On Hold Resources section



Music On Hold

security mappings **resources**

Global Media List

ID	Description	Length
10	Gain_padded_media	303 seconds

ID	Description	Gain	File size	Length	Actions
11	Seasonal	0	1.79 MB	234 seconds	Edit Delete
12	Piano	0	1.87 MB	245 seconds	Edit Delete

ID Description Upload local resource file Actions

[Choose File](#) No file chosen [Add](#)

Disk Used: 3.66 MB of 10 MB used.
Resources: 2 of 10 used.

Global Media List

The Global Media List section specifies any recordings that we have made available for your use. Whether we make any recordings available to you depend on which service you have subscribed to. You cannot add or remove recordings from the Global Media List.

Your own recordings

The second section displays any recordings that you have uploaded to the system, either using this web interface or via the phone access.

Recording limits

At the bottom of this section you will see:

- how many MB of storage you have used
- how many MB of storage you are allowed
- how many recordings you have uploaded
- how many recordings you are allowed.

The system will not allow you to exceed either your storage limit or the maximum number of recordings you are allowed.

Recording formats

You can upload recordings to the system in either WAV or MP3 format.

Adding a recording

To add your own recording, follow these steps:

1. Enter an ID for this recording in the *ID* text box. This ID must be between 10 and 99.
2. Enter a description for this recording in the *Description* text box.
3. Click on *Browse* and select the recording you wish to upload. This must be either a .wav or .mp3 file.
4. Click on *Add*.

Depending on the size of the recording you are uploading this process may take a few seconds.

Modifying a recording

To change the description of a recording, follow these steps:

1. Click on the *Edit* button to the right of the recording.
2. Edit the *Description* field.
3. Click *Save*.
4. To change the volume at which a recording will play, follow these steps:
5. Click on the *Edit* button to the right of the recording.
6. Select a new *Gain* value from the drop-down list.
 - Select 0 to play the recording at its original volume,
 - Select +1, +2 or +3 to play the recording louder, with +3 being the loudest.
 - Select -1, -2 or -3 to play the recording quieter, with -3 being the quietest.
7. Click *Save*.

Playing a recording

You can play a recording that you have uploaded by clicking on the *ID* or *Description* link for that recording. Note that this will play the recording at its original volume – the *Gain* setting has no impact on playing a recording through this interface.

If you want to check the effect of changing the volume of a recording you should log into the phone interface and play the recording from there. For more details on this, see Section 12.2.1.

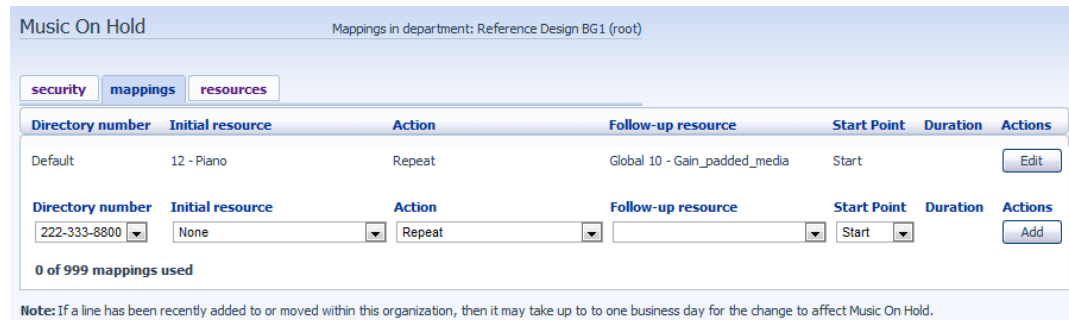
Removing a recording

To remove a recording click on *Delete* to the right of the recording you wish to delete.

12.1.4 Assigning recordings to lines

You can assign recordings either to all lines in your business, or different recordings per line. To do this you need to access the mappings section.

Figure 73: Music On Hold Mappings section



You will now see a list of mappings between the directory numbers of lines in your Business Group or department and the Music On Hold resources that each line uses.

If the department you are an administrator of has one or more sub-departments, you will see links to these at the bottom of the screen.

To manage resources for a line that is in a sub-department, click on the link for that sub-department.

When you have followed the link to a sub-department, an additional link appears at the top of the screen, allowing you to move back up to the parent department.

There is always a default mapping, which is used if you don't specify a mapping for a particular line.

Each mapping consists of a series of fields which you can set:

An *Initial resource*, or recording, which is played when the call is put on hold.

Optionally a *Follow-up resource*, or recording, which may be played depending on the *Action*.

An *Action*, which can be one of:

- Repeat – The initial recording is played continually.
- Play Once – The initial recording is played once, and then the follow-up recording is playing continually.
- Repeat – Initial Interrupted – The initial recording should be interrupted at set intervals by the follow-up recording. This could be used to interrupt music with an announcement indicating that the user is in a queue.
- Repeat – Follow-up Interrupted – The initial recording is played first. Then the follow-up recording plays continually being interrupted by the first recording.

The *Start point* field indicates whether the recording will start at the beginning (the value *Start* indicates this) or whether it should start at a random point of the recording (the value *Random* indicates this).

The *Duration* field which is used by the *Repeat – Initial Interrupted* and *Repeat – Follow-up Interrupted* actions to indicate how often the repeated recording should be interrupted.

Adding a mapping

To add a mapping for a particular line, follow these steps:

1. Set the fields to the left of the *Add* button.
2. Click on *Add*.

Modifying a mapping

To modify either the default mapping, or the mapping for a line, follow these steps:

1. Click *Edit* to the right of the mapping.
2. Modify the fields.
3. Click on *Save*.

You cannot modify the telephone number that a mapping applies to. If you need to do this, remove the mapping and add a new one.

Removing a mapping

To remove a mapping click on the *Delete* button to the right of the mapping. You cannot delete the default mapping.

12.2 Phone access

Using this interface you can:

Listen to the music or other recordings for the default mapping or the mapping you have configured for any of your lines.

Listen to the Global Media Resources we have made available.

Create, change or delete your own recordings.

12.2.1 Logging in

To access the telephone interface for Music On Hold, dial 555-555-5555 from your phone. To log in you need to enter:

1. Your telephone number.
2. Your Music On Hold password. You can view or change this by using CommPortal as described in Section 12.1.2.

12.2.2 Using the telephone interface

The telephone interface is menu driven with voice prompts, so listen to the prompts and then press the keys on your phone to select which option you would like.

For your convenience the top-level menus provided by the telephone interface are documented here:

- *. Press * at any time to go back to the previous menu.
- 1. Listen to resource for default mapping. This will play you the recording which is played to callers on hold for extensions which do not have their own mappings.
- 2. Listen to resource for particular extension. This will play the recording which is played to callers on hold on a particular extension.
- 3. Listen to global resources. This allows you to listen to the recordings in the Global Media List, described in Section 12.1.3. You will need the 2 digit resource ID of the recording you want to listen to.
- 4. Manage existing local resources. This allows you to modify or delete recordings you have added to the Music On Hold system, including recording a new resource to replace an existing one. You will need the 2 digit resource ID of the recording you want to modify or delete.
- 5. Record new local resource. This allows you to record a new resource over the phone.

A Glossary

This appendix describes the important concepts used in your phone system.

A.1 CommPortal

CommPortal provides a web interface to your phone system, and allows end users and Business Administrators to modify their settings. There are two CommPortal interfaces.

1. The first is for regular users to manage their business telephony settings.
2. The second is for Business Administrators to modify both global settings for the business and to modify end-users' settings.

The second of these interfaces is the one which you will use to administer the phone system and is described by this document. For more details on using the first interface, please see the *Metaswitch Hosted PBX End User Guide*.

A.2 Logging into CommPortal as another user

You may at times need to log into CommPortal on behalf of another user. This will enable you to view and modify the user's settings just as that user can by using the regular CommPortal interface. Here are some examples of when this would come in useful.

If a user has forgotten their password you can log on and change the password to a new value.

If the user is unable to access CommPortal but needs a setting changed urgently, such as Call Forwarding, you can log on and do it for them.

There are a few differences between the regular CommPortal interface and what you will get to see when you log in as another user.

The Dashboard page is not available so by default CommPortal takes you to the Call Manager page.

The Voicemail page is not available for privacy reasons.

A.3 Phones

The Hosted VoIP solution supports a number of different types of phone. These have different keys from each other and differ in their operation. For specific instructions on using the phones, please see the *Metaswitch Hosted PBX End User Guide*.

A.4 Phone numbers

Every phone line within your business has its own DID (Direct Inward Dial) number, which is a regular 10 digit number including the area code, such as 555-555-5556. Within your business you are able to assign extension codes to these phone numbers. These are shorter numbers (typically 3 or 4 digits although they can be longer) which enable your employees to quickly call each other.

Your phone system is capable of having multiple lines configured on a single phone. You could configure one line on a phone which is that employee's personal DID, and another line which is your business's main switchboard number. Calls to both numbers will make this one phone ring.

Your phone system is also capable of sharing lines between phones. This means that in the example above, each phone in your business could have its own DID line, and a second line which is your business's main switchboard number. Then every phone would ring when a call came into your switchboard.

We will assign your business one or more blocks of numbers which you can then assign to phones as you wish. You can then define your own extension codes which map to these numbers. Alternatively, if you have asked us to, we will have pre-configured your system so that the phone numbers and extension codes are already assigned.

A.5 MAC addresses

Every phone has a unique identifier called a MAC address. The phone system uses this identifier to uniquely identify a phone.

This MAC address is printed on a sticker on the phone, usually underneath. It consists of 6 groups of 2 letters or numbers, and will be printed in one of two forms:

FE:DC:BA:12:34:56

FEDCBA123456

A.6 Departments

Many smaller businesses will only have a single administrator, or a number of administrators who all manage the entire phone system. However, if you work in a larger enterprise you may have different administrators each with responsibilities for the phones of different parts of your organization.

Therefore our Hosted PBX solution supports the concept of departments. Every phone line and phone is a member of a department. Departments are hierarchical, with some departments having sub-departments. An administrator of a department is permitted to manage all phones, lines and other resources within that department. They are also allowed to manage the sub-departments.

Even the smallest business will have at least one department in the phone system, known as the top-level or root department, and where there is only one department all of the phone lines and phones will be part of this.

Larger businesses will have multiple departments, and phones and lines can be moved around these departments to allow different administrators to manage them.

An administrator's phone line is always part of the department he is the administrator for. Moving the administrator's line to a different department will remove his permissions for managing the department he used to be in, and give him permissions to manage his new department.

A.7 Phone profiles

A department's phone profiles consist of default phone configuration which will be automatically applied to all phones within that department. There is a different profile for each type of phone within the department.

As an example, a department may deploy three types of phones:

- Aastra 53i
- Aastra 55i with 3 560M sidecars
- Aastra 57i with a 536M sidecar

In this case a department can have up to three profiles – one for each type of phone.

A department inherits the phone profiles from any parent departments, so parent departments can specify some elements of a phone's configuration, and the sub-department can configure others.

A.7.1 Phone profile graphical view

You can configure the keys of the phone using the graphical view so that the phones used by people in your department will contain these settings by default. For example you can configure a key to access voicemail which will be configured on every phone in your department.

A.7.2 Phone profile table view

The table view allows you to configure a wider range of settings than just key settings, and provides a more powerful interface.

Lock settings so that neither end-users nor administrators in sub-departments can override settings.

Hide settings so that neither end-users nor administrators in sub-departments can view settings.

Configure ringtones.

Configure the phone display.

Configure the time and date format, and time zone.

Note: the exact options available to you will depend on your phone model and the level of phone service you have subscribed to. In some cases there may be more advanced features available to you.

A.7.3 Copying phone configuration

If you need to replace a user's phone for them, because the old one breaks, you may have to copy the configuration of the old phone to the new phone. This is described in section 4.7.

Note: Copying phone settings is only supported if you are replacing the old phone with a new phone of exactly the same model. If you are upgrading the phone, you or the user will need to manually apply any settings to the new phone.

A.8 Network

The phones for your Hosted PBX use an Ethernet-based network to communicate with our systems. This is the same technology that provides computers with access to a network. These phones are also powered via Ethernet so if you have a compatible Ethernet switch there is no need for separate power connections to the phones.

Most of the phone models can also provide network access to the computers at users' desks. This means only a single network connection needs to be run to each desk.

As your telephone calls travel over an IP network the quality of the network in your offices is very important. Normally we or one of our partners will either supply and install your network, or verify that your network is suitable for Hosted VoIP.

However, it's very important that you only connect the right type of network device to the right network connection. If you connect the wrong type of equipment to your network then it may reduce the quality of your telephone calls, or even stop your telephone system working altogether. We will tell you when we install or verify your network which connections can be used for what.

A.9 Multiple Appearance Directory Numbers

From V7.4 onwards, MLHGs are enhanced to provide the same function as MADNs by providing a 'ring all' distribution algorithm. MADNs will continue to work as in previous versions. However, for new configuration, you should use MLHGs instead. For more information on MLHGs, see section A.10.

A Multiple Appearance Directory Number (MADN) is a telephone number with no phone or line associated with it. Instead the MADN is configured to have a number of MADN members, each of which is a number with a line associated with it. Whenever a call comes in to the MADN all of the lines whose directory numbers are MADN members will be rung. When any of these phones is answered the rest of the phones will stop ringing.

A line may be a member of one more than one MADN. In this case it rings when a call comes in to any of the MADNs that the line is a member of.

MADNs can also be configured to enable queuing. If configured, calls which come in to a MADN whose members are all busy will be queued. These queued calls will receive Music On Hold if you have subscribed to this feature.

You can configure to allow calls direct to a MADN member's directory number (rather than to the MADN itself). If permitted, these calls bypass the MADN and use the called number's services. Similarly, calls made from the MADN member's phone use the line's caller ID and call services rather than those of the MADN, although you can configure the calling party number on these lines to match the MADN number if required.

A.10 Multi Line Hunt Groups

A Multi Line Hunt Group allows sequential ringing of available phones for use in applications such as call centers. An MLHG consists of a number of lines within the business group, known as members. When a call comes into the hunt group, a hunt algorithm will decide which phone to ring. If this phone is busy or is not answered the hunt algorithm will move on to another phone.

Hunt groups have a pilot number, which is a directory number associated with the MLHG. When this pilot number is called the members of the MLHG are alerted in turn.

Alternatively, a hunt group can be configured to hunt if any member of the hunt group is called directly using its DID number and doesn't answer.

There are various distribution algorithms available:

Linear – hunting starts at the first configured line and goes sequentially through the members in the list in the order they were configured.

Circular – hunting starts at the line which has been called, and then goes through as in the linear case.

Uniform – hunting starts at the first line after the line which was called the last time this MLHG was called.

Most idle – hunting starts at the line which has been idle for the longest period of time. After this it tries the line which has been idle the next longest period, etc.

Ring all – all free MLHG members ring simultaneously until one member answers the call.

MLHGs can also be configured to enable queuing. If configured, calls which come in to an MLHG whose members are all busy will be queued. These queued calls will receive Music On Hold if this feature is configured.

If you are able to view and download statistics for activity in your MLHGs from the main MLHG page, the interface will use slightly different terminology within the statistics UI.

A Queue refers to a MLHG.

An Agent refers to a member of a MLHG.

A.11 Call Pickup Groups

Group Call Pickup allows users to pick up calls that are ringing on other phones (in a pre-defined pickup group within the same business group by picking up their own phones and dialing an access code). Note that if two or more phones within the pickup group are ringing at the same time, the user cannot control which call is picked up.

You can have multiple groups in your business. A line can be in multiple Call Pickup Groups. If a call is ringing on lines in both groups simultaneously and the user who is in both groups picks up a call, then they will pick up the call which started ringing first.

Directed Call Pickup is similar, but allows the user to pick up the call that is ringing on a specific phone within the group. Users pick up their own phones, and dial an access code followed by the extension code for the line which is ringing.

A.12 Short Codes

Short codes are speed dials that are defined at the scope of your organization – so everyone in your business can use these speed dials.

A.13 Extensions

Extensions are the codes you can dial to reach other people in your business.

A.14 Account codes

Account codes:

- Authorize employees to make outbound phone calls
- Associate a reference number to outgoing phone calls that your business makes.

Once you have dialed a number that requires an account code you will hear a tone. This is the prompt to enter the account code. Once the account code has been correctly entered the call will be made.

There are two types of account codes.

1. **Validated Account Codes.** When the user making a phone call enters the account code it is checked against a list of valid account codes. If the account code matches one on the list the call will continue. If the account code doesn't match any on the list then an error is played.

You should use Validated Account Codes when you want to stop any unauthorized personnel from making outbound calls.

2. **Unvalidated Account Codes.** When the user making a phone call enters the account code this account code is marked against the call in our billing system and the call continues. The account code isn't checked for validity.

You can use Unvalidated Account Codes where you want to be able to record an account code against outgoing calls that you make. If you have signed up to the service with us then when we provide you with your phone bill the account code for each call will be marked on your bill. This is useful, for example, if you are billing your clients for all of your phone calls.

You can set up either type of account code either for your whole business, or select from either validated and unvalidated for each line individually. You can allow your users to manage their account codes.

A.14.1 Auto Attendant – Easy / Premium Attendant

MetaSphere provides two solutions for Auto Attendant functionality. Easy Attendant offers a very simple automated telephone menu. Callers to a business are directed to the automated TUI, providing key options to transfer to specific departments or individuals in the business, to transfer to a voicemail account directly, or to listen to a recorded announcement. You can choose to have either a single menu that plays when Easy Attendant is turned on, or two different menus for business and non-business hours that are used according to a pre-defined schedule. When Easy Attendant is turned off, you can either forward callers to another telephone number or play a message informing the caller that your business is currently closed.

Premium Attendant, aimed at small and medium business subscribers, offers an increased level of service compared to Easy Attendant. In addition to all the features offered by Easy Attendant, Premium Attendant allows multiple menus with a finer scheduling control. It also includes more call handling options, such as Voicemail by Name and Voicemail by Extension, as well as greater control over the actions taken for any given key press.

A.15 Music On Hold

The Music On Hold system lets you configure music and recordings to be played to your callers when you put them on hold. You can either use recordings we have made available, or upload and make your own recordings.

You can access the Music On Hold system either using CommPortal, or using your telephone. The CommPortal interface is more powerful and easier to use, but you can use the telephone interface to record your own announcements to be played to callers.

A.15.1 Music On Hold performing rights

Playing music to callers on hold may constitute “public performance” of the music and therefore risks infringing the copyrights of composers or artists. Therefore you may need to obtain appropriate licenses to play any material that you plan to use as Music On Hold.

You can obtain these licenses from licensors such as Broadcast Music Inc (<http://www.bmi.com/>) and the American Society of Composers, Authors and Publishers (<http://www.ascap.com/>).

We do not accept any legal liability arising from copyright infringements associated with your use of Music On Hold, except where you use the Global Media Resources described in Section 12.1.3.