

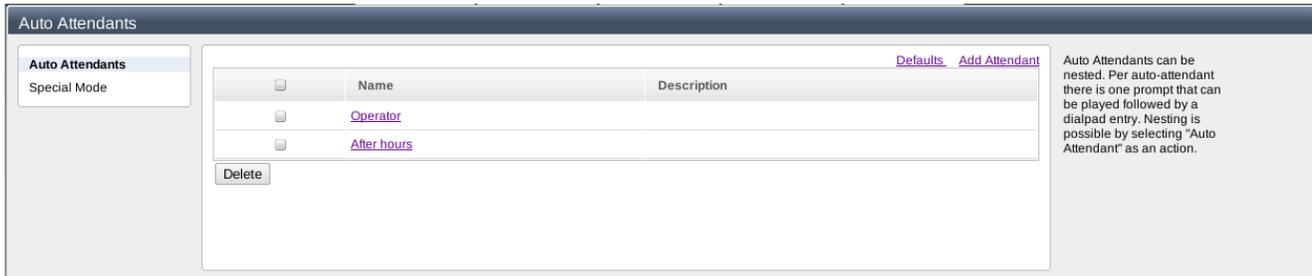
Auto Attendant

The sipXecs Auto-Attendant Service

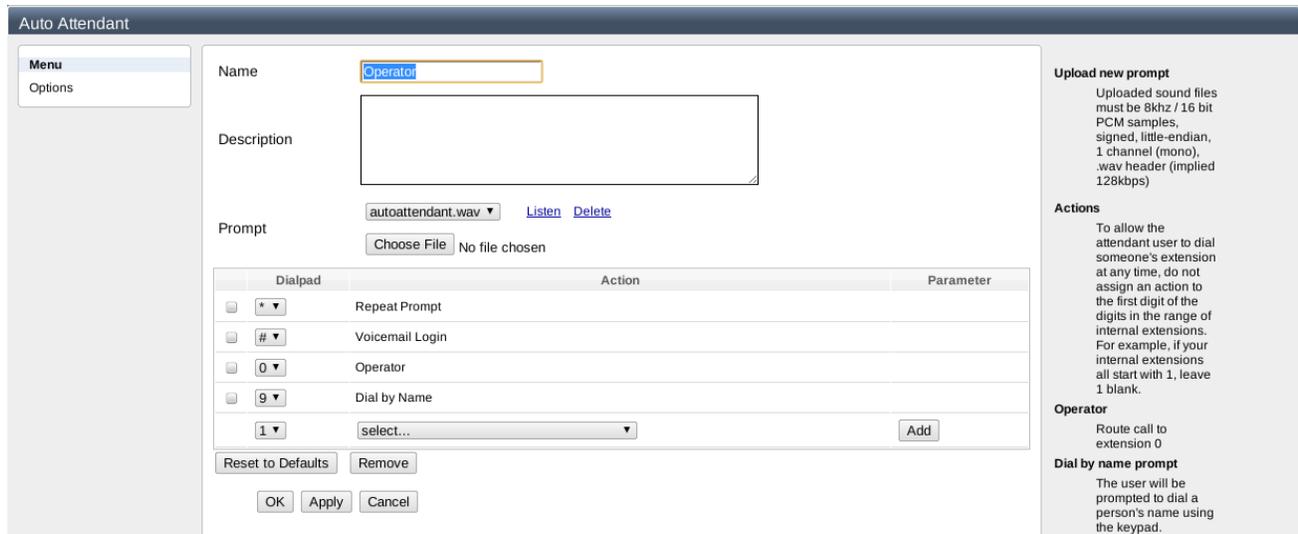
The sipXecs IP PBX system includes a configurable auto-attendant application provided by the sipXecs Media Server. The auto-attendant application provides an automated, system-wide answering service for incoming calls, a dial by name feature, automated transfer to a local extension, transferring the call to an operator, or remote voicemail retrieval. Multiple auto-attendants can be created using the Web based configuration interface (Configuration Server). The default auto-attendant configured when the system is installed is called *Operator* and it is accessible by dialing *100*.

Configuring Auto-Attendants

Using Configuration Server navigate to *Auto Attendants* entry under the *Features* menu. A list including all the currently defined auto-attendants will display. After system installation the default attendant *Operator* is already configured and ready to be used.



The standard attendant "Operator" is defined as shown below but can also be easily customized. In particular, the default extension can be changed based on your internal dial plan. If you use a 3 digit internal dial plan, the auto-attendant extension should also be three digits. The *Name* is just an identifier for the auto-attendant and does not represent a User ID that can be dialed. The default auto-attendant defines for different prompts: *Repeat Prompt*, *Voicemail Login*, *Operator*, and *Dial by Name*. Additional prompts available include: *Disconnect*, *Auto-Attendant*, *Go to Extension*, and *Voicemail Deposit*. In particular, the *Auto-Attendant* prompt allows you to cascade different auto-attendants. *Voicemail Deposit* allows a caller to deposit a voicemail message for a user without first ringing the user's extension number.



v3.2 Starting with version 3.2 you do not configure autoattendant extension on this screen. Dialing plan configuration is now fully responsible for assigning extensions to autoattendant. It is now possible to have a single auto attendant accessible through multiple extensions.

Configuring Dialing Plan

Attendant Dial Rules

v3.2

You need to configure attendant dialing rules in order to associate extension with autoattendant. Dialing plan also gives you the option of assigning aliases to your attendants.

Click [here](#) for more information about attendant dialing rule.

Internal Dialing

v3.0

v2.8

The *Internal Dialing* rule allows the definition of the default auto-attendant to be used by the system, as well as auto-attendant aliases (default: *operator*, *0*).
Note: Aliases are case sensitive.

```
{{Box Important|When a call is not picked up it is transferred to voicemail. The caller then is given the option to press "0" to talk to an operator. When pressing "0" the call is effectively transferred to sip:operator@<domain.com>. If the default auto-attendant is assigned the alias operator then callers will be transferred to the default auto-attendant. If instead you would like callers to be transferred to a real person, the alias operator has to be assigned to this person. Aliases have to be unique, so that an alias can only be assigned to one person or extension. If you would like to have several phones ring when a caller presses "0" either assign the user with the alias operator to several phones or assign the alias operator to a hunt group and configure parallel forking.}}
```

Go to *Dial Plans* then open *Internal*. Several instances of the dialing rule *Internal Dialing* can be used.

Dial Rule

Enabled

Name

Description

Internal station extension length
Number of digits used for internal extensions in your installation. Add another voicemail rule if you have phones with different length extensions.

Voicemail extension
Extension to dial to call voicemail. Leave empty to disable voicemail.

Voicemail inbox prefix
Dial voicemail prefix followed by an internal extension to directly call voicemail for that extension. Leave empty to disable.

Voicemail type

Only one voicemail type can be configured on a system.

Voicemail host

IP address or name of the voicemail server. Leave empty if the voicemail server runs on the same computer as the call server.

Schedule

Note: Make sure you activate the dial plan in order for changes to become effective.

Special Auto Attendant

v3.2

Starting with version 3.2 you can override default auto attendant selection. This is particularly useful if you want to temporarily redirect all calls to a single, "emergency" auto attendant. In order to do that select Special autoattendant from the drop down menu and click "use special auto attendant" radio button. After you press Activate sipXconfig will configure the system to use a single auto attendant and ignore all other attendants configured in dial plan.

In order to revert to normal operation select "use auto attendant configured in dial plan" and click Apply.

Please note that sipXconfig cannot determine if system has a special auto attendant already selected. Special Auto Attendant screen can be only used to set special auto attendant. It does not provide any information, if special auto attendant mode is activated and - if that's the case - which auto attendant is selected.

Auto Attendants

Auto Attendants
Special Mode

Use the auto attendant configured in the dial plan
 Use the special auto attendant

Special auto attendant

Use special auto attendant to temporarily overwrite the auto attendant configuration. By default the auto attendant is selected based on the auto attendant dialing rules. If the special auto attendant is activated it is used to handle all calls.

How to enable Users to be listed in the Auto-Attendant?

To include a sipX user in the Auto-Attendant's dial by name directory, the user has to have the respective permission. Permissions can either be defined for users individually or the user must be a member of a group with such permissions (default permission *Attendant Directory: disabled*).

User Group Settings

Configure
Unified Messaging
Schedules
Conference
External User
Speed Dials
Music On Hold
Permissions
Caller ID
Personal Auto-Attendant
Instant Messaging
MyBuddy
Call Forwarding

Permissions

General Permission

Superadmin Access (Default: unchecked)
User can log into administration interface.

Change PIN from IVR (Default: checked)
User can change PIN value from Voicemail system. PIN is used to log into voicemail system and web interface. PIN does not affect the password phones use to authenticate with registration server.

Configure Personal Auto Attendant (Default: checked)
User can configure personal auto attendant

Configure Music on Hold (Default: checked)
User can configure music on hold

Subscribe to Presence (Default: checked)
User can monitor the presence status of other users

Call Permission

900 Dialing (Default: unchecked)
User can dial 900 numbers

Attendant Directory (Default: unchecked)
List user in Auto Attendant

Configuring the Gateway

There are different ways of how to handle incoming calls from the PSTN. Typically calls placed to the company number are routed to an auto-attendant, where the caller has the option to reach an operator if necessary but otherwise can reach an extension directly or dial by name.

Therefore, the gateway needs to be told which extension to call for incoming calls. The default setting is to configure the gateway to route incoming calls to the extension of the default auto-attendant *Operator* (i.e. send calls to extension *100* or alias *operator*).

Auto Attendant Customizations

The Auto-Attendant application provides the complete set of pre-recorded prompts that play to callers. A prompt may provide information only or present options which a caller can select using the phone's key pad.

The caller experience can be customized by changing the call sequence, the options available to callers, as well as the prompts played.

- Generic system greeting: *"Welcome to the — Communication System."*
- Initial Auto Attendant prompt: *"If you know your party's extension, you may dial it at any time. To dial by name, press 9. To reach the company operator, press 0."*
- Options and call sequence that correspond to the default auto-attendant

Changing the Generic System Greeting

The generic system greeting that plays to all callers by default is *"Welcome to the — Communication System."* To replace this informational prompt, you can record a set of greetings, each appropriate for a different situation, and specify which greeting the auto-attendant should play.

You can record the following different types of system-wide greetings:

- Standard greeting
- After hours greeting
- Special occasion greeting

TIP! You can replace the initial auto-attendant prompt with one that includes a welcome statement, rather than playing two different prompts in sequence.

You use the sipX Voicemail application to record system greetings. As a result, the Voicemail application must be set up before you can proceed.

To change the generic system greeting:

1. Script your new standard, after hours, or special occasion greeting.
2. Select an end user to record the greeting.
3. In the sipX interface for administrators, select the user that represents that end user. In the Permissions category, set the *User can record system prompts* permission to ENABLE.
If this user does not have a voicemail inbox, you must also set the *User has voicemail inbox* permission to ENABLE.
4. Save the change.
5. The end user logs in to his or her voicemail inbox from a phone. The main voicemail menu for that user will include a system administration option.
6. The end user follows the prompts that play:
 - a. Press 7 to access system administration.
 - b. Press 1 to manage system greetings.
 - c. Select a greeting type to record.
7. When the end user completes and accepts the recording, the newly recorded prompt immediately begins to play to all callers.
8. Optionally, the end user can repeat this process to record a different system greeting, such as an after hours or weather emergency greeting.
9. To select the greeting that plays to callers, the end user follows the prompts to select one of the previously recorded system greetings.
 - a. Press 7 to access system administration.
 - b. Press 1 to manage system greetings.
 - c. Press 4 to select the system-wide greeting.
 - d. Select the greeting to play.

Changing the Initial Auto Attendant Prompt

The initial Auto Attendant prompt plays immediately after the system greeting. By default, this prompt is *"If you know your party's extension, you may dial it at any time. To dial by name, press 9. To reach the company operator, press 0."*

You can:

- Replace this prompt with a new prompt that describes the same options.
- Replace this prompt with a different prompt that describes different options. For example, you could add an option that lets callers transfer to your company help desk by dialing 1. To customize the options available with this prompt, see page 17.
- Prevent this prompt from playing at all.

Replacing the initial prompt

To replace the initial Auto Attendant prompt:

1. Script the new prompt.
2. If required, change the options available with the new prompt. See page 17.
3. Select an end user to record the prompt.
4. In the sipX interface for administrators, select the user that represents that end user. In the Permissions category, set the *User can record system prompts* permission to ENABLE.

If this user does not have a voicemail inbox, you must also set the *User has voicemail inbox* permission to ENABLE.

1. Save the change.
2. The end user logs in to his or her voicemail inbox from a phone. The main voicemail menu for that user will include a system administration option.
3. The end user follows the prompts that play:
 - a. Press 7 to access system administration.
 - b. Press 2 to manage the Auto Attendant prompt.

- c. Press 1 to record the Auto Attendant prompt.
4. When the end user completes and accepts the recording, the newly recorded prompt immediately begins to play to all callers.

Preventing the initial prompt from playing

To prevent the initial Auto Attendant prompt from playing to callers:

1. Enable the User can record system prompts permission for an end user.
2. Using a phone, that end user logs in to his or her voicemail inbox. The main voicemail menu includes a system administration option.
3. The end user follows the prompts that play:
 - a. Press 7 to access system administration.
 - b. Press 2 to manage the Auto Attendant prompt.
 - c. Press 3 to prevent the initial Auto Attendant prompt from playing.

Changing Initial Auto Attendant Options

If you customize the initial Auto Attendant prompt, you can customize the options that are available to callers when the initial Auto Attendant prompt plays. By default, these options match the description provided by the initial Auto Attendant prompt: pressing 0 transfers the caller to the operator, and pressing 9 triggers the dial by name series of prompts. Another, unstated option allows callers to transfer to voicemail by pressing #.

To customize the options available when this prompt plays, you associate one of the dial pad buttons on a touch tone phone?0 through 9, star ★ , and pound (#)?with one of these functions:

```
<table width="85%">
<tr bgcolor="#cccccc">
<td>Function</td><td>Description</td>
</tr>
<tr bgcolor="#cccccc">
<td>dialbyname</td><td>Plays the supplied dial by name prompt sequence</td>
</tr>
<tr bgcolor="#cccccc"><td>repeatprompt</td><td>Replays the initial Auto Attendant prompt</td></tr>
<tr bgcolor="#cccccc"><td>voicemail</td><td>Transfers the caller to voicemail</td></tr>
<tr bgcolor="#cccccc"><td>transferstoextension</td><td>Transfers the caller to a specified address</td></tr>
<tr bgcolor="#cccccc"><td>hangup</td><td>Disconnects the call</td></tr>
<tr bgcolor="#cccccc"><td>none</td><td>No action. If the caller presses the button associated with this function, the initial Auto Attendant prompt replays</td>
</tr>
</table>
```

By default, the initial Auto Attendant options are:

```
<table width="85%">
<tr bgcolor="#cccccc">
<td>Function</td><td>Button</td>
</tr>
<tr bgcolor="#cccccc">
<td>transferstoextension, with a defined address of sip:operator@<your_domain></td><td>0</td>
</tr>
<tr bgcolor="#cccccc">
<td>dialbyname</td><td>9</td>
</tr>
<tr bgcolor="#cccccc">
<td>repeatprompt</td><td>*</td></tr>
<tr bgcolor="#cccccc">
<td>voicemail</td><td>#</td>
</tr>
</table>
```

To change these options, you modify a VXML precursor file named root.vxml.in on your sipX server. This file refers to values for Global Definitions.

TIP! Do not make edits directly to the root.vxml file. This file is generated dynamically from its precursor file, root.vxml.in.

To set up an option, you define two VXML variables for each dial pad button you want to enable in the root.vxml.in file:

aa_option_<buttonID>

Specifies the function to associate with the button in the format:

```
<var name="aa_option_<buttonID>" expr="'<function>'" />
```

For example:

```
<var name="aa_option_0" expr="'transferstoextension'" />
```

aa_option_<buttonID>_extn

Used only if the function defined by the aa_option_<buttonID> variable is 'transfertoextension'. Specifies the destination address in the format:

```
<var name="aa_option_<buttonID>_extn" expr="'<address>'" />
```

For example:

```
<var name="aa_option_0_extn" expr="'sip:0@${SIPX_DOMAIN_NAME}'" />
```

For all other functions, this variable should be set to none. For example:

```
<var name="aa_option_1_extn" expr="'none'" />
```

In the CUSTOMIZABLE PARAMETERS section of this file, find the VXML variables you want to change. For example, if your customized initial Auto Attendant prompt offers an option that transfers callers to the sales department when they press 1, you change these lines:

```
<var name="aa_option_1" expr="'none'" />
```

```
<var name="aa_option_1_extn" expr="'none'" />
```

to:

```
<var name="aa_option_1" expr="'transfertoextension'" />
```

```
<var name="aa_option_1_extn" expr="'sip:sales@<domain>'" />
```

To test your change, using the phone top interface, connect to the Auto Attendant. After your custom initial prompt plays, verify that each of the buttons you enabled has the correct associated function.

Specify an Operator Address

Several prompts provided by Media Server applications offer a *transfer to extension* option that transfers the call to an operator. By default:

- When a caller selects a *transfer to operator* option at any prompt, sipX transfers the call to *sip:operator@<your_domain>*.
- The specified auto-attendant extension corresponds to the alias *sip:operator@<your_domain>*.

You can replace this default behavior by supplying the system operator address that is appropriate for your installation. Once changed, all prompts with a transfer to operator option use your customized address.

To change this address, you modify a VXML precursor file named root.vxml.in on your sipX server. This file refers to Global Definitions.

TIP! Do not make edits directly to the root.vxml file. This file is generated dynamically from its precursor file, root.vxml.in.

In the CUSTOMIZABLE PARAMETERS section of this file, find this line:

```
<var name="operatoraddr" expr="'sip:operator@${SIPX_DOMAIN_NAME}'" />
```

and change the address to an appropriate SIP URL. For example, to change it to extension 116:

```
<var name="operatoraddr" expr="'sip:116@${SIPX_DOMAIN_NAME}'" />
```

To test your change, connect to the Auto Attendant. When the initial Auto Attendant prompt plays, press 0. Your call should be transferred to the newly designated address.