IVR Setup

To set up an Interactive Voice Response extension, follow the recommendations below.

Overview

The IVR allows a computer to detect voice and dualtone multi-frequency signaling (DTMF) keypad inputs. Using an IVR extension, customers can access and control the VoipNow features via a telephone keypad.

The IVR guides the customers using prerecorded or dynamically generated audio, directing them on how to proceed with their requests.

After having defined the **general settings**, you can start setting up the options specific to the IVR extension type. At the same time, you may skip this step and come back any time later on by navigating to IVR setup Edit IVR from the extension's management page.

IVR management

This section allows to set up basic IVR extension related options like setting the IVR name, timeout and description.

Option	Details
Name	Provide a descriptive name for your IVR extension.
Clone IVR Settings From	In case you want to replicate all the settings of an existing IVR, you may select the IVR you want to copy from the drop-down list. Please check the **IVR Report** for structural errors after cloning another IVR. If you clone an IVR extension that belongs to another service provider, some problems may arise. In case an option that transfers calls to an extension number is enabled, the system will not copy that extension number. Also, in case options that transfer calls to extensions in specific time intervals, the time intervals will not be copied.
Default Music on Hold Folder	This folder contains the sound files that will be played in order when the caller is on hold or when the extension waits for an operation to be performed. Click the icon to view the available folders. A pop-up window that allows you to select the desired default music on hold folder will be displayed. You can read more about the Music on Hold Manager in the **Appendix**.
Timeout	Limit the time interval within which an IVR caller can remain inactive while the IVR waits for their input. Between: 2 to 60 seconds; default: 8 seconds.
IVR Session Lifetime	Limit the total time interval an IVR caller can spend in the IVR menu. Between: 10 to 86,400 seconds; default: 1,800 seconds.
If Lifetime Expires	Choose the action that will occur when the IVR's lifetime expires. • **Hangup** - The call will be terminated. • **Transfer to Extension -** The call will be transferred to another extension when the IVR's lifetime expires. Specify the extension's number or click the icon to open a popup window displaying a list with all the available extensions that belong to the same organization. Select the extension you want your call to be transferred to. You can only transfer the calls to phone terminal and queue extension types. • **Play Sound** - A sound will be played to the caller when the IVR's lifetime expires. Use the icon to view available sound files or to write the address of the file in the text box. A pop-up window listing all available sounds matching the specified name will be displayed. You can read more about the Sound Manager in the **Appendix**.
Description	Use the text area to associate some notes about the purpose and content of the IVR.

CallerID management

This section allows you to set up CallerID settings.

Option	Details

CallerID Name in Public Calls	The options described below allow you to customize the CallerID name that will be displayed on the callee's screen when the extension is calling public destinations. • **Set by server:** If it supports the CallerID function, the callee's phone terminal will display the extension owner's Contact name. • **Set by equipment:** If it supports the CallerID function, the callee's phone terminal will display the caller's name as set up from the phone terminal device. • **Set by user:** If it supports the CallerID function, the value defined here will be displayed by the callee's phone terminal; by default, the text box contains the extension's **Contact name**, but you can set the CallerID name to a custom alphanumeric value.
CallerID Number in Public Calls	The options described below allow you to customize the CallerID number that will be displayed on the callee's screen when the extension is calling public destinations. • **Set by server:** If it supports the CallerID function, the callee's phone terminal will display the extension's public phone number. • **Set by equipment:** If it supports the CallerID function, the callee's phone terminal will display the phone number of that particular phone terminal device. • **Set by user:** If it supports the CallerID function, the value defined here will be displayed by the callee's phone terminal; by default, the text box contains the extension's phone number, but you to set the CallerID number to a custom numeric value with three or moral digits;

<table>
<tr><td>Currently Using CallerID Numbers</td><td>
Allows you to choose one or several CallerID numbers that will be sent when an outgoing call is initiated.
The numbers available are the ones defined for the channel(s) (resource) used for routing the calls to public destinations.

• The custom text box displays the CallerID number(s) currently in use; the default number is displayed using bold characters
• To add a CallerID number, click the Change link and a pop-up window will be displayed allowing you to manage the CallerIDs
• In order to be displayed in this list, the public phone number(s) defined for the channels (resources) used for routing the calls to public destinations must be assigned to the client owning this extension
• It is possible to assign CallerIDs associated with DIDs that are on the user pool, but that have not been assigned to any extension

Please note that a CallerID can be set as default even if it has not been assigned to the extension's DID pool.

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td>CallerID number</td><td>The CallerID of the DID assigned to the client that owns this extension;
It is the Caller ID number displayed by the callee's phone terminal when receiving a call from this extension;
Public phone numbers can be defined for a certain channel from the Channels Channel <channel_name> management Add public phone numbers to channel <channel_name> page;
For more info, you may also check this section.</td></tr>
<tr><td>Rings back to</td><td>The extension that rings the DID associated with this CallerID;
If the CallerID was not assigned to the extension, then '-' is displayed;
The public phone numbers can be assigned to the extension from the Roles and Phone Numbers for Extension <extension_name> page. For more information see this section.</td></tr>
<tr><td>Resource</td><td>The ID of the channel the public phone number was defined for.</td></tr>
<tr><td>Default</td><td>This area defines the CallerID's status.
It can be Set as default if it is associated with the extension and if it is not the default CallerID.
It can be set to Yes if the CallerID is associated with the extension and it is the default one.
It can be set to - if the CallerID has not been associated with this extension and cannot be used for outgoing calls.</td></tr>
</table>

To associate a CallerID with the extension, you need to select the corresponding checkbox and click the Assign CallerIDs link. To disassociate a CallerID, you need to select the corresponding checkbox and click the Remove selected link.

1. If you have selected more than one CallerIDs for a resource (channel), then the system will send a random one to the public destination.

Example:

Let us assume that the outgoing calls are routed through a resource (channel), <code>Resource #1</code>, for which three public phone numbers have been defined and assigned to the client that owns the extension: <code>1123, 345876</code> and <code>2854478</code>. If you associate all three of them with the extension, when initiating an outgoing call, the callee's phone terminal will display, if it supports the CallerID function, one of the three numbers.

2. If you have selected CallerIDs for more than one resource (channel), then the system will send the CallerID of the resource that routes the call.

Example:

Let us assume that the outgoing calls are routed through <code>Resource #1</code>, for which one public number has been defined and assigned to the client who owns the extension: <code>2255</code>. You associate this number with the extension and another one, <code>6987560</code>, defined for <code>Resource #2</code>. If it supports the CallerID function, when initiating an outgoing call, the callee's phone terminal will display <code>2255</code>.

3. If calls are routed through a resource that does not have a public phone number assigned and you have a CallerID that belongs to another resource set as default, then the system will send the default CallerID.

Example:

Let us assume that the outgoing calls are routed through a resource (channel), <code>Resource #1</code>, for which no public phone numbers have been defined. Your default CallerID is set to <code>3689</code>, which belongs to another resource (channel), <code>Resource #2</code>. If it supports the CallerID function, when initiating an outgoing call, the callee's phone terminal will display <code>3689</code>.
</td></tr>
<tr><td>Do Not Send CallerID on Public Calls</td><td>Applies if you do not want your CallerID to be sent to public destinations. If the callee's phone terminal supports the CallerID function, it will display the <code>Anonymous</code> string.</td></tr>
<tr><td>Send Public CallerID on Internal Calls</td><td>Applies if you want the public CallerID (when available) to be used for local and extended local calls as well. It allows the association between the CallerID of the Phone terminal user and an existing card code defined for the same CallerID.</td></tr>
<tr><td>Preserve Original CallerID on Transferred Calls</td><td>Applies if you want VoipNow to keep the original CallerID when the call is forwarded between destinations.</td></tr>
</table>

Send SIP P-Asserted-Identity and P-Preferred-Identity headers	Allows the headers to be added to all outgoing INVITE requests sent from this extension. The SIP P-Asserted-Identity header contains the caller ID number of the extension, e.g. P-Asserted-Identity:sip: 0003*003@localhost.localdomain. The P-Preferred-Identity header is sometimes used to indicate an additional identity of preference when there is a choice. These headers are preserved only on outgoing external calls, e.g. P-Preferred-Identity: "John White" <sip:johnny@somedomain.org>.

Once you have created the IVR extension, you can define its behavior by designing the IVR menu and the caller's possibilities to interact with the system.

The **IVR <extension_name>** management page allows you to:

- view the defined IVR Contexts
- edit IVR settings
- configure a new IVR context
- view the IVR schema. After adding the extension, the IVR schema cannot be generated because there are no contexts defined. The **IVR Schema** icon is disabled
- check the IVR report. The IVR report is available only if at least one context is defined for the extension. A warning message is displayed, informing you that you must add an entry context in order for the IVR to be accessible by phone
- search for specific contexts
- remove unused IVR contexts

Contexts table

VoipNow displays the following details about the the available IVR contexts:

- **R:** The context exposure.
  -  The context is reachable an can be accessed from another context inside the IVR.
  -  The context cannot be accessed from another context inside the IVR.
- **Context:** The context's descriptive name. Click the link to edit its settings.
- **Active options:** The number of active options defined for the context. The actions can be defined for:
  - **start** – The sequence of actions executed when the caller reaches the context.
  - **timeout** – The sequence of actions executed when the caller remains inactive during the timeout time interval defined for the IVR.
  - **invalid** – The sequence of actions executed when the caller presses a key (0–9, *, #) which has no action associated with it.
  - **0–9, *, #** – The sequence of actions executed when the caller presses the corresponding key on his phone pad.
- **Created:** The date the IVR context was added.

The entry context is displayed using bold characters.

Edit an IVR

The IVR's settings can be modified using the controls available in the **Edit IVR <extension_name>** page.

Related topics
IVR extension setup

Most common IVR use cases

Ways to build enhanced IVRs

Setting up a call center

Add IVR Context

Add Action

IVR operations