

Creating *your* IVR.

IVR menus are key in getting your customers through to the right department efficiently. Within this guide, we will show you how to create a basic IVR menu with three different options; “1” for Sales, “2” for Support and “3” for Accounts.

All options will dial two internal extensions and playback a whisper when your agents answer a call. All options will have a department-specific voicemail message and mailbox for when agents are not available to answer a call.

At the end of this guide, we will show you how to add clever dial plan logic to deal with scenarios where your caller presses an invalid option, or no option at all.

By the time you have finished this guide, you will have a fully functioning, professional IVR menu for your business.

Step 1 Your IVR messages.

Before starting your IVR menu, ensure you have all the necessary audio files.

Today we’ll be using seven audio files; one auto-attendant file, three department voicemail messages and three department whispers. Whispers are played to your agents when they answer the call, ensuring they know which option the caller pressed.

1. *Auto-Attendant.wav*
2. *Accounts-Voicemail.wav*
3. *Sales-Voicemail.wav*
4. *Support-Voicemail.wav*
5. *Accounts-Whisper.wav*
6. *Sales-Whisper.wav*
7. *Support-Whisper.wav*

To use audio files in your dial plan, first upload them to the IVR Recordings section of Metis. All files **must** be in the following format: **.wav, 8000Hz, 16bit, Mono**

The screenshot displays the 'Customer Administration' interface in Metis. On the left is a dark sidebar with a menu containing options like 'Administration', 'Services', 'Sales Invoices', 'Reports', 'Call Rates', 'Add Transactions', 'Notes', 'Services', 'Hardware', 'Availability Check', 'Dashboards', 'Numbers', 'Extensions', 'Voicemail', 'Queues', 'Incoming Calls', 'Outgoing Calls', 'Call Blocking', 'Call Recordings', 'IVR Recordings', and 'Diagnostics'. The main content area is titled 'Main Contact' and shows a form with the following fields: Title (Mr), First Name (Demo), Last Name (User), Contact Email (voip@packnet.co.uk), Contact Telephone (01616602350), Contact Mobile (Empty), Fax Number (01616602350), and Primary Contact (Demo User). To the right of this form are several sections for additional information: Company Details, Technical Contact, Billing Information, Login Details, Other Account Information, and Account Notes.

Step 2
Incoming Calls.

To start building your own IVR menu, go to the Incoming Calls section of Metis and find your number. Once you’ve found your number, your screen should look like this:

01618265284

Add To

Modify

Delete From

Create Dialplan

Dialplan Contents

Extension	Priority	Application	Application Data
start	1	Macro	recincall,demo,01618265284
start	2	Wait	2
start	3	Set	CALLERID(num)={CALLERID(num)}

☒ Backup this dial plan ☐ Restore this dial plan from a backup

Submit

Here is a quick breakdown of the items displayed on this page and what they mean:

BUTTONS	
ITEM	DESCRIPTION
<div>Add To</div>	This button lets you add new steps to your dial plan.
<div>Modify</div>	This button lets you change steps in your dial plan.
<div>Delete From</div>	This button lets you delete steps in your dial plan.
DIAL PLAN CONTENTS	
ITEM	DESCRIPTION
Extension	Use this field for adding IVR options, e.g. Extension 1 is option 1, extension 2 is option 2 and so on. Your dial plan can have several “extensions”. All calls come in on the “start” extension and then work their way through the priorities. Valid inputs for this field are numbers 1 - 9.
Priority	The order your dial plan works its way through the extension.
Application	Dial plan applications include Dial, Playback, Queue, Voicemail etc.
Application Data	Specifies what the application is doing.
BACKUPS	
ITEM	DESCRIPTION
Backup this dial plan	Lets you save a backup of the selected dial plan.
Restore this dial plan from a backup	Overwrites your dial plan with the selected backup.

Step 3
Auto-attendant.

When dialling your number, the first thing the caller should hear is your auto-attendant. Your auto-attendant should include all of your IVR menu options.

To achieve this, we need to add it to your dial plan by following these steps.

Click **Add To** next to your number, and select the following from the drop-down menus that follow:

MENU	INPUT
Extension (leave blank for start extension)	N/A
Priority	Add to end
Application	Background
Sound file	Auto-Attendant

Extension (leave blank for start extension)

Priority

Add to end

Application

Background

Sound File

Auto-Attendant

Submit

Step 4a Adding your first IVR menu option.

The next step in building your IVR menu is the addition of your IVR menu options.
We will be adding three options today;

1. Sales
2. Support
3. Accounts

Once selected, each option will ring two extensions and play a whisper to the agent when the call is picked up. This is to ensure that the agent is aware of the option selected by their client.

Adding IVR options is easier than you think. Click [Add To](#) and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	1
Priority	Add to end
Application	Dial
Internal Extension or External Number?	Internal Multiple Numbers
Internal Numbers	100,101
Ringing time	10 seconds
Announcement played to recipient	Sales-Whisper

Extension (leave blank for start extension)

1

Priority

Add to end

Application

Dial

Internal Numbers (All / None)

☒ 100

☒ 101

☐ 102

☐ 103

☐ 104

☐ 105

☐ 106

☐ 200

☐ 201

☐ 203

☐ 300

☐ 400

☐ 401

☐ 500

☐ 606

Ringing time

10 seconds

Announcement played to recipient

Sales-Whisper

Submit

Step 4b

Adding a voicemail message and mailbox to your IVR option.

Now you have your first IVR option. But what if your agents are away or on a call?

A voicemail step should be added just in case.

If you cast your mind back to the beginning of this article, you'll remember how we are using department specific voicemail messages:

1. Sales-Voicemail.wav
2. Accounts-Voicemail.wav
3. Support-Voicemail.wav

In our IVR menu, option 1 is for sales so we are going to use our Sales-Voicemail.wav message and voicemail box 100.

Click [Add To](#) and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	1
Priority	Add to end
Application	Playback
Sound File	Sales-Voicemail

Extension (leave blank for start extension)	<input type="text" value="1"/>
Priority	<input type="text" value="Add to end"/>
Application	<input type="text" value="Playback"/>
Sound File	<input type="text" value="Sales-Voicemail"/>
<input type="button" value="Submit"/>	

We're using the **Playback** application for the voicemail messages, rather than the **Background** application that we used for the Auto-Attendant message.

There is an important difference between the two; **Background** registers any key pressed during the duration of the audio file, **Playback** will play the audio file back and not register any key presses.

Once you've added your voicemail message, you should to add a voicemail box so customers can leave a message. Click [Add To](#) again and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	1
Priority	Add to end
Application	Voicemail
Voicemail Mailbox	100
Play Unanswered Message	No
Suppress Default Message	Yes

Extension (leave blank for start extension)	<input type="text" value="1"/>
Priority	<input type="text" value="Add to end"/>
Application	<input type="text" value="Voicemail"/>
Voicemail Mailbox	<input type="text" value="100"/>
Play Unanswered Message	<input type="text" value="No"/>
Suppress Default Message	<input type="text" value="Yes"/>

You have now successfully added your first IVR option.

Adding options 2 and 3 should be a breeze for you. Follow step 4 again but replace “1” in your extension field with “2” or “3” depending on which option you are configuring.

Step 5 IVR problems and solutions.

Technically, you now have a fully functioning IVR menu for your business. But there are several other scenarios we should be thinking about:

Problem

No time for caller to think after hearing your auto-attendant

There is no time for the caller to press their option, the dial plan configuration ends immediately after your auto-attendant.

Solution

Adding a “WaitExten” step following your menu.

Adding a **WaitExten** following your auto-attendant gives the caller some thinking time after they’ve heard your menu. Click [Add To](#) and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	Blank
Priority	Add to end
Application	WaitExten
Wait Time	5 seconds

Extension (leave blank for start extension)

Priority

Application

Wait Time

Submit

Problem

Caller presses an invalid option... nothing happens.

With our current set up, if a caller were to press an invalid option, e.g. option 6, nothing would happen. Perhaps they could do with a reminder of your options?

Solution

Add “invalid option selected” logic.

The application **GoTo** combined with extension **i** (invalid) allows you to add some basic logic into your dial plan for when a customer presses an invalid option.

In this example, if a caller presses an option which does not exist, we will place the caller back into priority 4 and play your IVR menu again.

It works like this -- the system will recognise an invalid input and begin initiating the **i** extension. Our **i** extension is configured to use the **GoTo** application, which lets you decide where to make to call go to.

In this example, we'll make the call go (back) to the **start** extension, specifically **priority 4**, which is the auto-attendant.

Click [Add To](#) and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	i
Priority	Add to end
Application	Goto
Goto Context	demo-01618265284
Goto Extension	start
Goto Priority	4

Extension (leave blank for start extension)

i

Priority

Add to end

Application

Goto

Goto Context

demo-01618265284

Goto Extension

start

Goto Priority

4

Submit

Problem

Caller presses nothing... nothing happens.

We've all been there. You've misheard the options, or you were distracted when they were played to you. You wait for the menu to finish in the hope it replays but.... nothing.

Here's how to make your auto-attendant play again if your caller doesn't select an option.

Solution

Add "timeout" logic.

In this example, we will use the **GoTo** application again, but in conjunction with the **t** (timeout) extension. Click [Add To](#) and follow these steps:

MENU	INPUT
Extension (leave blank for start extension)	t
Priority	Add to end
Application	Goto
Goto Context	demo-01618265284
Goto Extension	start
Goto Priority	4

Extension (leave blank for start extension)	<input type="text" value="t"/>
Priority	<input type="text" value="Add to end"/>
Application	<input type="text" value="Goto"/>
Goto Context	<input type="text" value="demo-01618265284"/>
Goto Extension	<input type="text" value="start"/>
Goto Priority	<input type="text" value="4"/>
<input type="button" value="Submit"/>	

Success!

You are now in possession of a professional IVR menu for your business.

You have an auto-attendant, three options, going to three different departments, all with their own voicemail message and mailbox.

You even have failsafes included to ensure that callers don't get stranded in your IVR menu.

For more help with IVR menus contact Packnet's support team on 0161 660 2350 or by email on voip@pack-net.co.uk.