GP IVR User Guide:

Contents:

Introduction:

GP IVR is an interactive program which allows the creation of an IVR system, a triage of questions through a telephone call that then redirects the user to the appropriate place or clinician. In current iterations of the system, only “yes” and “no” speech answers are allowed from the user.

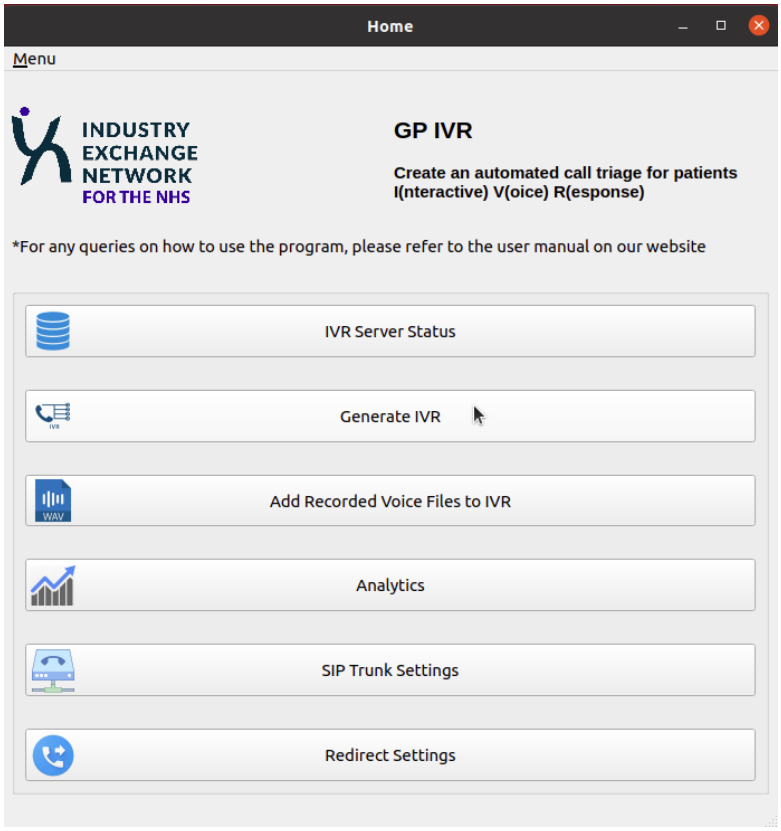
In order to setup the system, you first need to start the IVR server from the **IVR Server Status** page. Once this is done, you must set up your telephone number provider (e.g. Twilio) SIP trunk settings on the **SIP Trunk Settings** page. Once this is done, you are free to generate an IVR, either choosing a project from your Voiceflow account or uploading a Voiceflow “.vf” file to the program.

After setting where to redirect users after they’ve been through the triage of questions, users will then be able to call the IVR through any PSTN number (mobile and landlines). Speech files for the IVR are generated automatically from your Voiceflow diagram text. You can however add your own voice files for each point in the IVR.

Analytics of your IVR system can also be reviewed easily with the **Analytics** page.

This manual will go through each of the pages individually, explaining every feature within the program.

Home Page:

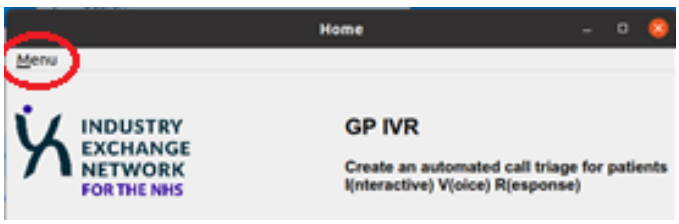


When first opening the application, you will see the **home** page which can be seen in the image above. From the **home** page you can navigate through the UI to find any section that you want to view. The pages that are directly accessible from the home page are:

- **IVR Server Status**
- **Generate IVR**
- **Add Recorded Voice Files to IVR**
- **Analytics**
- **SIP Trunk Settings**
- **Redirect Settings**

Each of these pages will be discussed later in this manual, and for reference of what each page does, you should look for the sections specifically for the relevant pages.

In the top left-hand corner, there is a **Menu** button. Left clicking this will bring up a pop-up menu that will allow you to navigate all of the pages specified above. The **Menu** button is available from all pages, meaning all these main pages can be accessed from anywhere in the program.

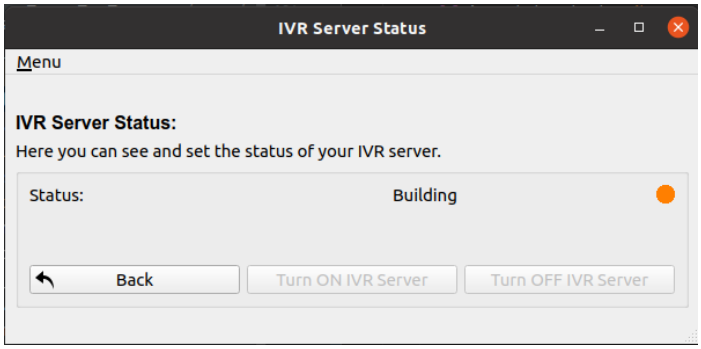


There is also an **Exit** button on the menu which allows you to exit the application. A very key point is that it is safe to exit this application and **exiting or closing the application will not turn off the IVR server.** This means that an IVR set up will continue to run until either the computer is turned off or the IVR server is turned off in the **IVR Server Status** page.

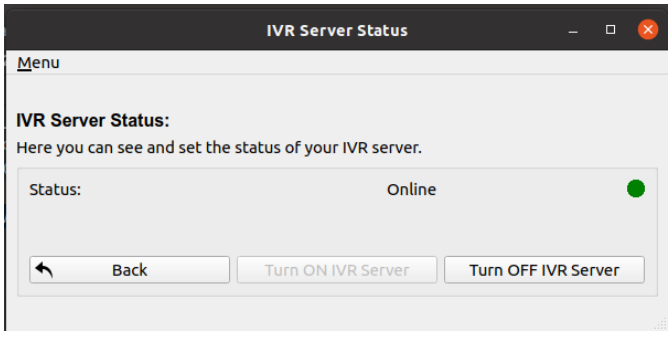
IVR Server Status Page:

The IVR server status page is a page to configure and view the IVR server status. The IVR server is what runs the IVR that users can call. There are 3 different statuses that you might encounter when viewing this page - **Building**, **Offline**, **Online**. They are discussed in more detail below.

When you first open the application, the IVR server will not be built yet. In order to build the IVR server and use it, you will need to navigate to the **IVR Server Status** page initially. This should start the **Building** process. You can then leave this page or stay there while you wait for the IVR server to build. This will likely take a few minutes on the first use, so be patient.

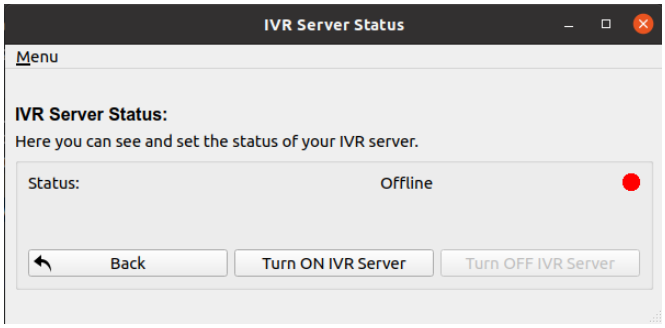


When you open the **IVR Server Status** page for the first time, it should show as **Building** as in the image above since the IVR server hasn't built yet. This just means that your computer needs some time to setup the IVR for the first time. This can take a few minutes. On future start-ups, you should never see the **Building** icon.

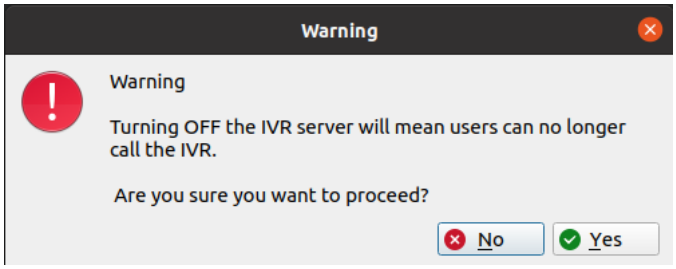


The **Online** status means that the IVR server is up and running and working normally. When in this status, if you have configured the other settings correctly, users will be able to call the IVR and it will function as expected.

If you want to turn off the IVR telephone system (for example at night) or you would like to restart the server, you can do so by clicking **Turn OFF IVR Server**. This will take a couple of seconds and then you should see the status change to **Offline**. Users calling your IVR number will then not get through to the IVR system.

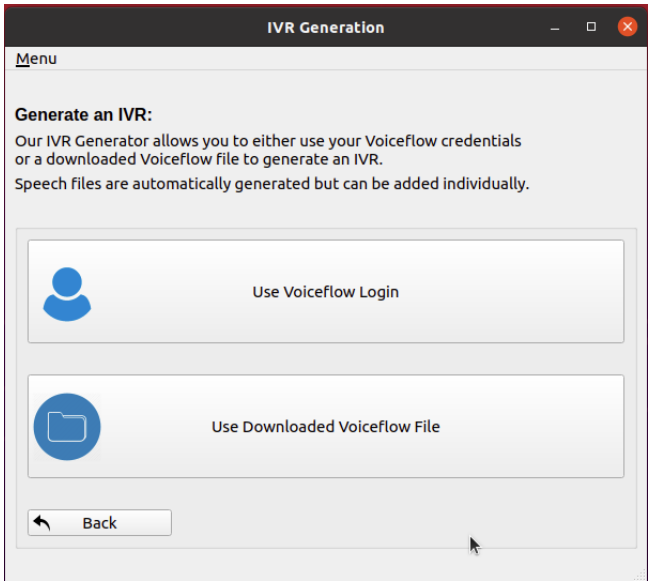


The **Offline** status means that the IVR server is not running. Users will be unable to get through to the IVR when they call the number that has been assigned to it. This is useful for example during hours when the IVR shouldn't be running. The IVR server will also be shut down if the computer it is running on is shut down.



When turning off the IVR, you will see a warning pop-up. If you are sure that you want to turn off the IVR server, click the **Yes** button. Clicking the **No** button or the cross in the top right will not turn off the IVR server. It is key to know that when the IVR server is turned off, users will no longer be able to call the IVR until it is turned back on. Users currently in the triage will be disconnected and unable to continue the triage.

IVR Generation Page:



An IVR is an interactive voice response, allowing a user to call a number, go through a triage of questions to which they can answer “yes” or “no” and then, depending on their answers get redirected to the appropriate resource or person.

This page can be accessed by going to the **Home** page and then clicking **Generate IVR**. It can also be accessed by clicking **Menu** in the top left-hand corner and then clicking **Generate IVR** from the menu.

The **Generate IVR** page gives you two options on how to generate an IVR for the system. These both revolve around our integration with Voiceflow. In order to create the diagram for the IVR, you will need to do so on Voiceflow at https://voicelfow.com.

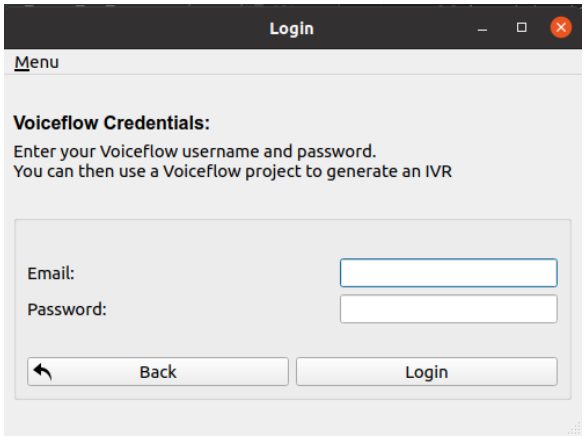
The two options for generating an IVR for the system are **Use Voiceflow Login** and **Use Downloaded Voiceflow File**.

Use Voiceflow Login – This should be used if you want to choose one of your Voiceflow projects directly to turn into an IVR. You will be asked to login with your Voiceflow credentials. These credentials are not stored on our system and used directly to find what workspaces and projects you have on your Voiceflow account.

Use Downloaded Voiceflow File – This will allow you to add a “.vf” file which can be downloaded for a particular project from the Voiceflow website. The file can then be turned into an IVR.

Speech files for each point in the IVR are automatically generated by the program. If you want to add your own voice files this is possible in the **Add Recorded Voice Files to IVR** page, found on the **Home** page or **Menu**.

Login Page:

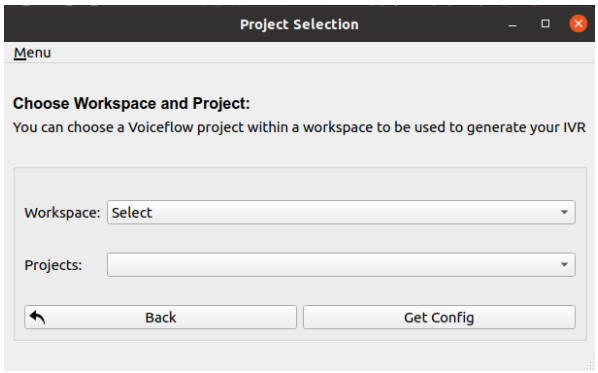


On the **Login** page, you are required to use your Voiceflow credentials to login. This is only necessary if you want to choose a project from your selection of projects on Voiceflow to turn into an IVR. Otherwise it is not necessary to login.

This page can be navigated to from the **IVR Generation** page by clicking the **Use Voiceflow Login** button.

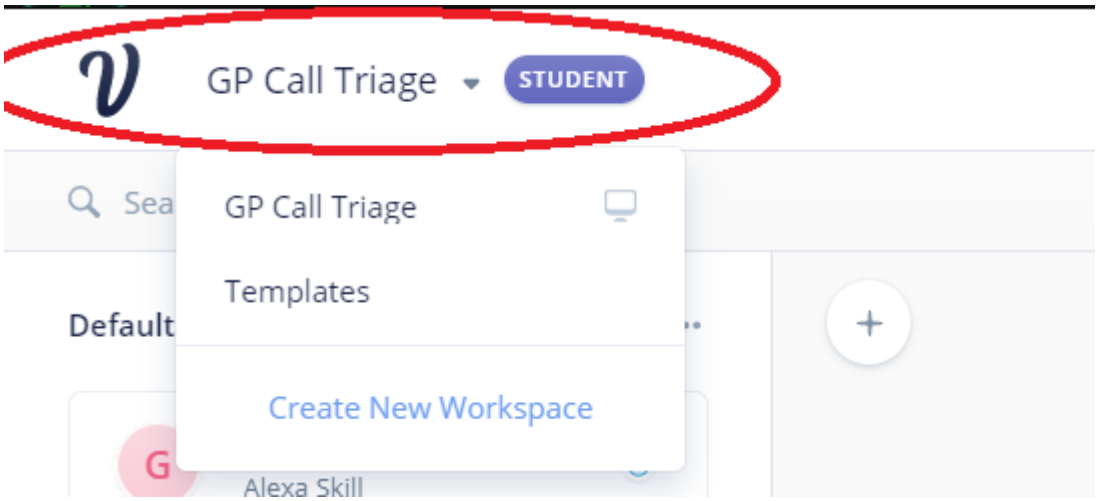
When logging in with your Voiceflow credentials, your credentials are not stored and are simply used to make a request to the sever to find what projects you have available.

Project Selection Page:



This page will be accessed once you have logged in to Voiceflow on the **Login** page. This will allow you to choose a workspace that your project resides in on Voiceflow. When you click on the **Workspace** drop down, you will be given a list of the available workspaces from your Voiceflow account.

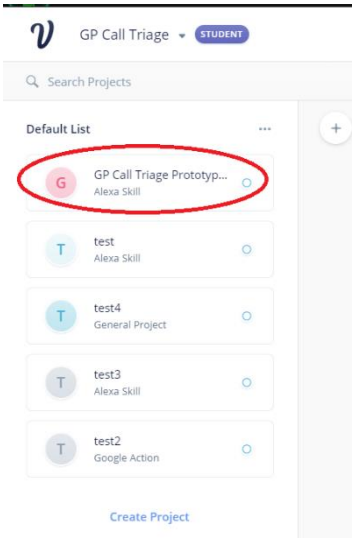
In order to check which workspace your project resides in on Voiceflow, on the Voiceflow website click on the **Voiceflow** icon in the top left corner.



This then tells me that the current workspace I am in is the GP Call Triage workspace. I then know to select this in the **Workspace** section on the **Project Selection** page of the GP IVR program.

Once a workspace has been selected, clicking on the **Projects** drop down will give you a list of the projects available from the workspace you selected.

A project name can be found on the Voiceflow website on the left-hand menu when you first login.

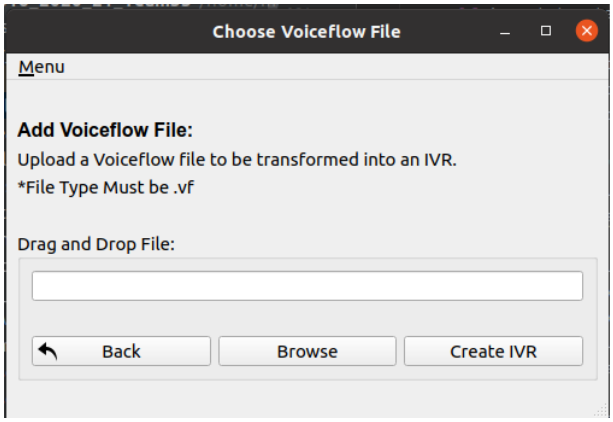


Here you can see that I have 5 projects and I have circled the project with name “GP Call Triage Prototyp…”

We are able to generate an IVR for both Alexa and Google based Voiceflow diagrams. Currently we do not support any of the other types.

Once a project has been selected, you can click the **Create IVR** button. This will create an IVR from the project that you have selected. This will then replace the IVR running on the live server.

Choose Voiceflow File Page:



You can get to the **Choose Voiceflow File** page by clicking on **Use Downloaded Voiceflow File** on the **IVR Generation** page.

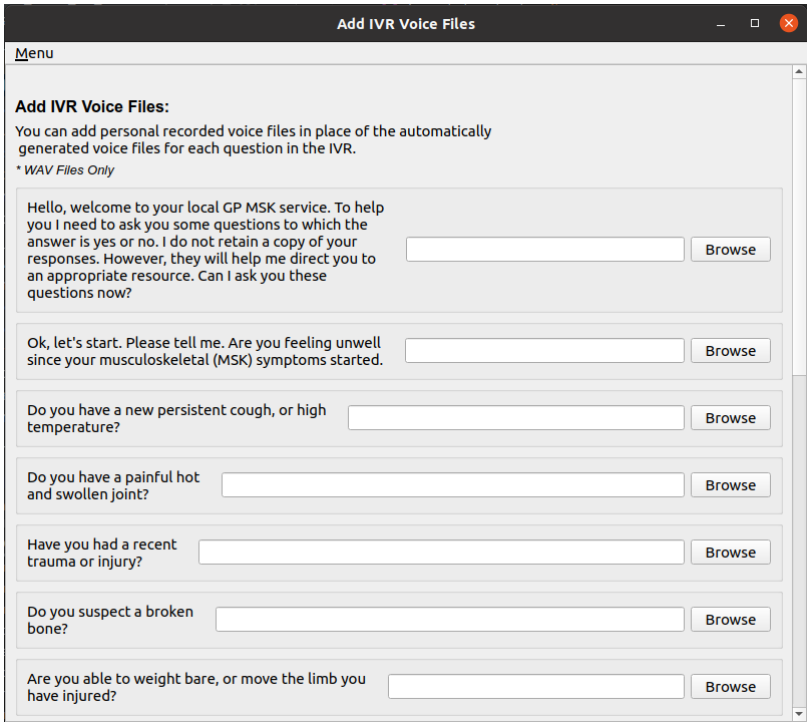
From here, you have the option to choose a ".vf" Voiceflow file to be used to generate the IVR. The file you choose must be of the ".vf" extension or it will be declined by the program.

You can click the **Browse** button to choose a file which will bring up your file explorer to choose the file you want to use. Alternatively, you can drag and drop a file into the box.

The file you use must be present on the computer from where you drag the file. This means that if you are trying to drag from your computer to a remote server running the IVR program, you will be unable to use the file. The file must be dragged from the remote server's storage.

When you click the **Create IVR** button, the IVR will be generated using the Voiceflow file you selected. This will then replace the IVR running on the live server.

Add Recorded Voice Files to IVR:



You can get to the **Add Recorded Voice Files to IVR** page either from the **Menu** button in the top left corner or from the **Home** page.

This page will show you the text for each point in the IVR that you currently have running on your system. If you would rather use your own recorded file for the IVR call speech instead of the automatically generated speech, you can do so here.

To add a file for each individual point in the IVR, you can click the **Browse** button for the corresponding point. This will open up your file explorer for you to choose a file. You can also drag and drop a file. As with adding a Voiceflow file, the file must be present on the computer the system is running on.

You can add your own files for all points in the IVR, or just a select few. The recorded audio files you add must be in a ".wav" format otherwise they will be rejected by the system.

Once you have added all files, you can navigate to the bottom of the page using the scroll bar and then click **Apply**. For any audio files that you added, this will then replace the automatically generated speech at that point with the audio that you added. Calling the IVR now will use your updated audio.

Analytics Page:

The **Analytics** page can be found on the **Home** page or from the **Menu** in the top left hand corner.

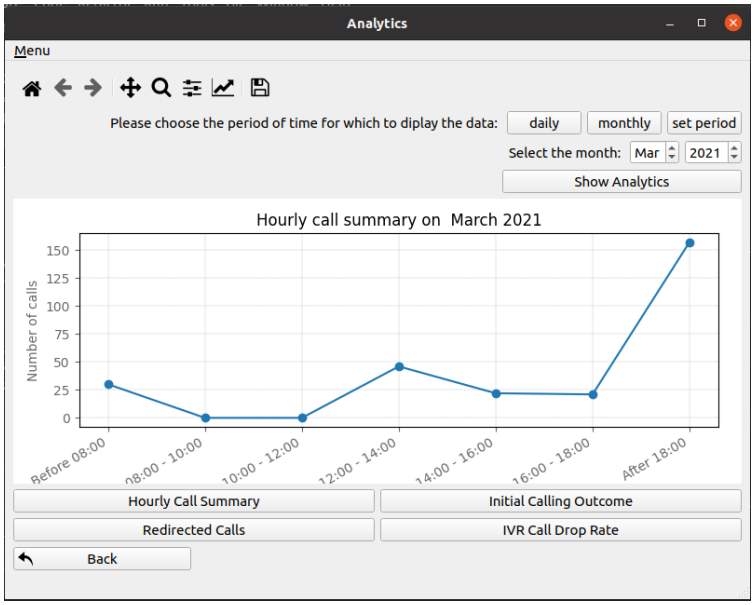
This page will show you various analytics about your IVR system. This will include all previous used IVR projects run on the system.

In order to filter the graphs, you can use the **daily** button in the top right corner to just view a particular day's analytics that you can then select.

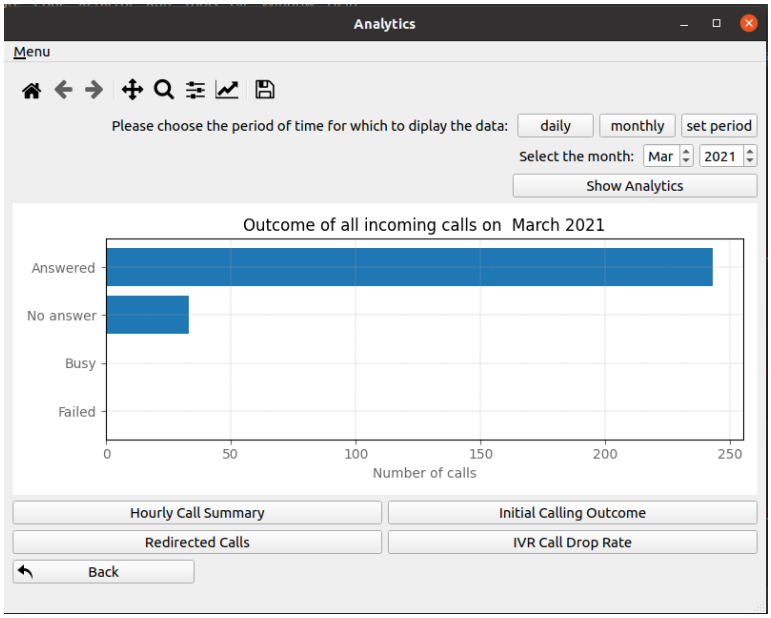
The **monthly** button in the top right-hand corner will show you the analytics for a month that you can then choose.

The **set-period** button in the right-hand corner will allow you to set a period over which you want to view analytics for.

Once you have changed these settings, you can click the **Show Analytics** button in order to update the graphs.



By clicking on the **Hourly Call Summary** button, you will be viewing a bar chart that shows how many calls to the IVR occurred for particular hours of the day. This allows you to see at what times of day most users are making calls to the IVR.



By clicking on the **Initial Calling Outcome** button, you will be able to see a bar chart. This shows what happed to callers when they first called the IVR over the time period you've selected.

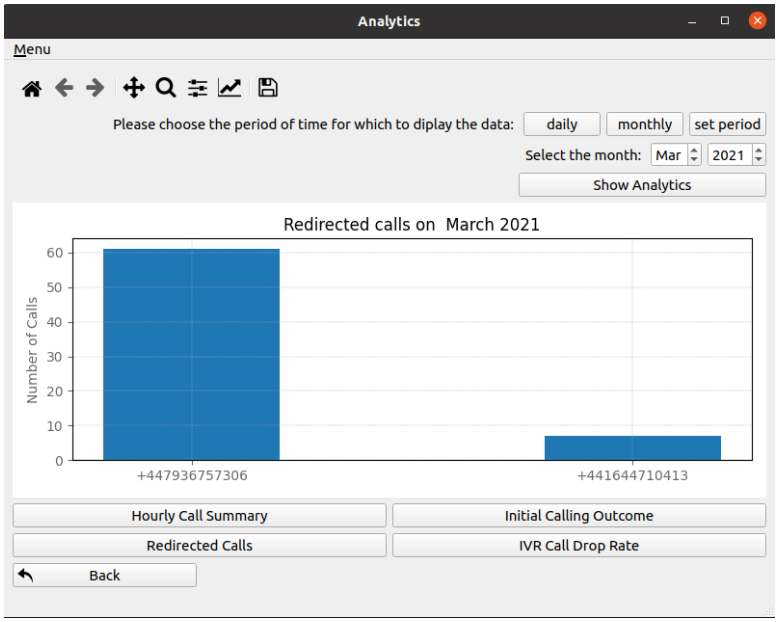
Answered – means that the caller successfully entered the IVR.

No answer – means that the IVR wasn't working properly and the caller did not get through. This should not occur unless there is a problem with the system.

Busy – means that the caller was busy. Because of this, the user did not get through to the IVR. This is very unlikely to happen since the IVR can take any number of simultaneous calls as long as the server can handle it.

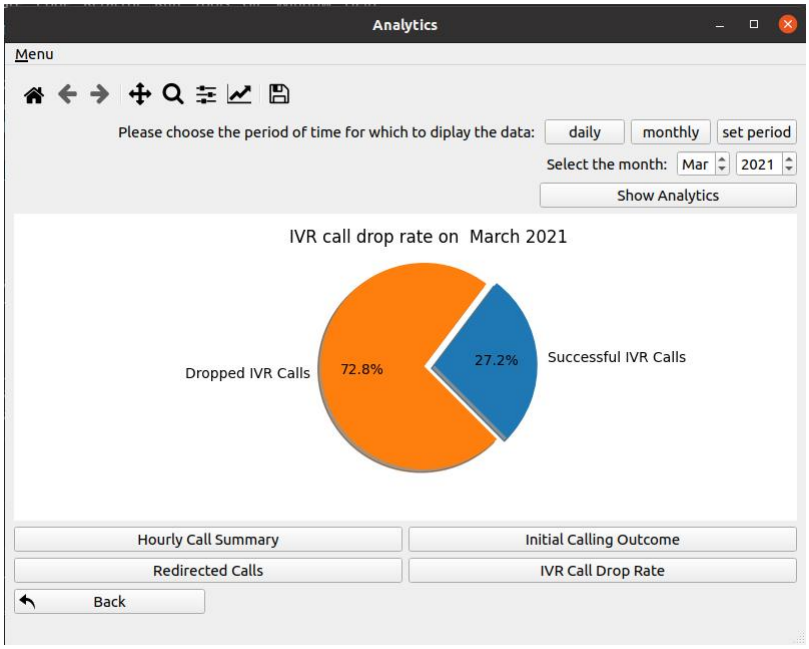
Failed – means that the call failed, and the user did not get through to the IVR. This could happen if the IVR server is overloaded with calls for example and cannot cope.

This graph should be used to check if there are any issues with your IVR system and to make sure users are always going through to the IVR call triage.



Clicking on the **Redirected Calls** button will show a bar chart which shows the number of calls being redirected to each number after the IVR call triage finishes. The numbers shown are over the time period that you've selected.

This is useful to see if more people are being redirected to one clinician or department than others, potentially signalling more staff are needed there.

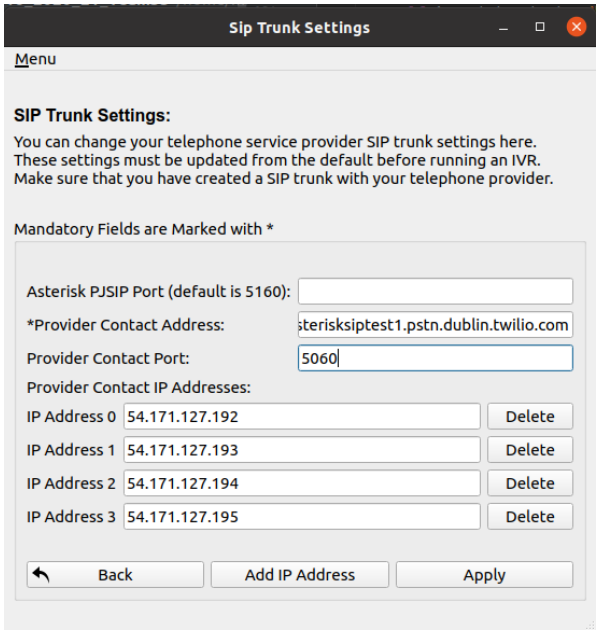


Clicking on the **IVR Call Drop Rate** button will show a pie chart of the number of calls dropped by the IVR and the number of successful calls. A dropped call is a call that ended during the triage of questions in the IVR. This could have been due to a signal issue, a problem with your IVR or most probably because the user hung up during the call triage.

A successful IVR call is a call that was successfully redirected after the triage of questions.

This page is useful for viewing whether people are enjoying the experience of the IVR or if they are hanging up prematurely.

SIP Trunk Settings Page:



The **SIP Trunk Settings** page can be accessed from the **Home** page or by going to the **Menu** in the top left corner.

This settings page must be filled out and applied before the IVR can be called.

In order to run this system, a SIP trunk must have been created with your telephone number provider being used to forward calls. When using Twilio, it is recommended that you set up an Elastic SIP Trunk using their website. When creating this with Twilio, make sure not to create credentials for your Termination Authentication settings.

We will discuss Twilio here, but another telephone number provider could be used as long as you can create a SIP trunk with them.

You can then set the relevant settings on the **SIP Trunk Settings** page:

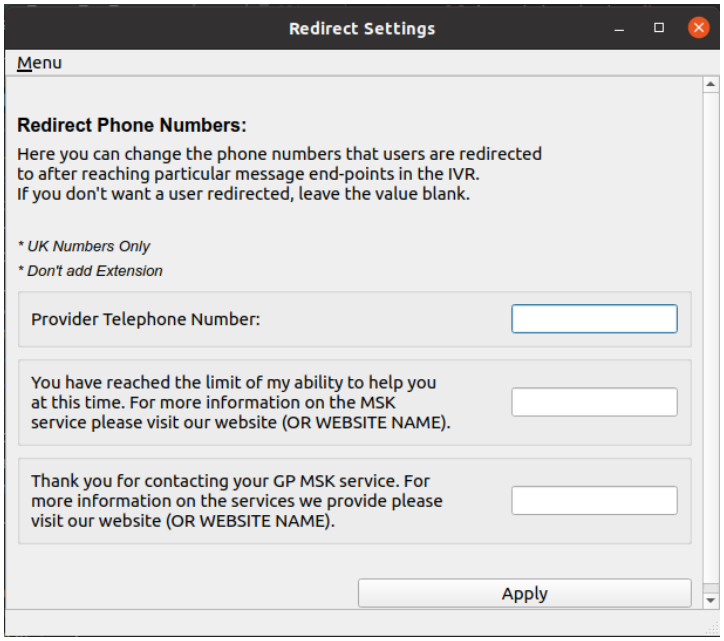
Asterisk PJSIP Port - This is the port the IVR server uses to communicate with the Twilio SIP trunk. For most purposes it should stay as the default (5160) unless there is a good reason to change this.

Provider Contact Address – This is the address that the IVR server uses to contact the Twilio SIP trunk. This is the **Termination SIP URI** on Twilio. You should also use the correct server location version of the UI – you can see I have “dublin” in the UI. This can be found in Twilio by looking at **Localized URIs.**

Provider Contact Port - This is the port that Twilio will use to communicate with your IVR server. This will be 5060 by default and this is what Twilio uses. You can change this if your telephone provider uses a different port.

Provider Contact IP Addresses – These are the IP addresses that Twilio could use to contact your IVR server. These can be found on Twilio’s website at https://www.twilio.com/docs/sip-trunking/ip-addresses for various different regions. As many of these addresses can be added as you need by clicking the **Add IP Address** button at the bottom. This will add another IP address text box which you can fill out.

Redirect Settings Page:



The **Redirect Settings** page can be accessed from the **Home** page or from the **Menu** in the top left corner.

This page allows you to add the telephone number that the IVR will use for redirecting calls in the **Provider Telephone Number** section. This will generally be your Twilio number associated with your Elastic SIP Trunk. This must be set before the IVR can be called and is the number users should use to call the IVR.

You then will have a number of sections which are the end points of the IVR you currently have running on the system. These are the points at which users should be redirected to the telephone number of the relevant department or clinician. You can set the telephone numbers that a user should be redirected to at each endpoint.

Only UK numbers can be used here, and the extension therefore should not be added to the number.

You can click the **Apply** button in order to apply the settings. Then users getting to each endpoint in the IVR will be redirected to the corresponding number that you have set.