

# iTest - Outbound Voice Testing Manual

Instructions for setting up and using Outbound Voice Testing



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## Logging in for the first time

1. Goto the following link: <https://portal.i-test.net/>
2. Enter your Username (normally your email address)
3. You should have received an email from the System with your password - key this in and press "Login"
4. You will be greeted with a Terms and Conditions screen – read and click the Accept button at the bottom
5. You will now be greeted with the Welcome to Portal wizard. The Wizard will take you through adding your first Switch Profile and your first Supplier to your Testing Account (You are not limited to the number of Suppliers you can setup)



## Add Switch Profile

**Name** - This is the name that will be displayed within the System to identify your Switch

**IP** - This should be the Public IP Address of your Switch

**Port** - the SIP Port, this is defaulted at 5060 - but if you use a different port you can enter it here

**Source Number** - This is the number (ANI)s that will be presented to the recipients of the test calls – It is recommended that you leave this field blank and the System will randomise the Source Number for each test call.

**Max Ring Duration** - This is the maximum amount of time you want the tests to ring for before classifying the test call as unanswered.

**Max Call Duration** - This is the maximum amount of time you wish the connected element of each test call to continue for until the test ceases the call.

Now Click the "Add" button next to the "Add Profile" text at the bottom right hand corner of the Add Switch Profile Section.

The Screen will refresh and advise you "Profile Added Successfully", **this screen will advise you of the IP Address of the Dialler that will initiate the test calls.**

**\*\*You now have to configure your switch to accept incoming calls from this IP Address.\*\***

The System has multiple diallers you may utilise - Go to Settings > Company > "Assigned SIP Server" drop down list for a full list of the available diallers and their IP Addresses you may use.

## Add a Single Supplier

Select - “Settings” > “Supplier” > “Add New Supplier”

**Name** - This is the name you want to use to identify this Supplier of yours

**Prefix** - This the Tech Prefix you will be using on your switch to ensure that calls coming inbound from the System are routed through to this specific Supplier. This field is not mandatory - it is dependant upon your switch configuration as to how your company routes your traffic to your Suppliers automatically.

**Codec** - This is the default codec you want the System to use for this particular Supplier. The default is G729, you can override this default when you are setting up tests using a simple selection box.

\*\*Now Click the “Add” button next to the “Add Supplier” text at the bottom right hand corner of the Add Supplier Section \*\*

\*\*The Screen will refresh and advise you “Supplier Added Successfully”.



## To Add More Suppliers

Select - “Settings” > “Supplier” > “Import Suppliers”

You may bulk import your suppliers using a simple import template or Add them manually.

Click on the Download Voice Example “CSV” icon, this will download a csv template with examples for you to populate your supplier information, you have to populate three columns, Supplier Name (followed by a comma) Codec (either “729”, “alaw” or “ulaw” - followed by a comma) and Prefix.

Save your file as a CSV locally on your computer and upload it by selecting the file from the “Choose File” button followed by the “Upload” button within iTest.

By selecting the Upload button iTest will automatically import all the Suppliers information contained within your CSV file.

## NDB – Number Data Base

Whilst your account is on the Trial Platform you will use the Trail System NDB Number Data Base, when your account is migrated to the Live Platform you will need to upload your own test numbers and dial codes to the System for Standard Tests to utilise via a simple CSV Upload.

## Instructional Videos

- Initiating a Standard Test [▶ Watch](#)
- Displaying Test Results [▶ Watch](#)
- Sharing Test Results [▶ Watch](#)



## FAQ Section

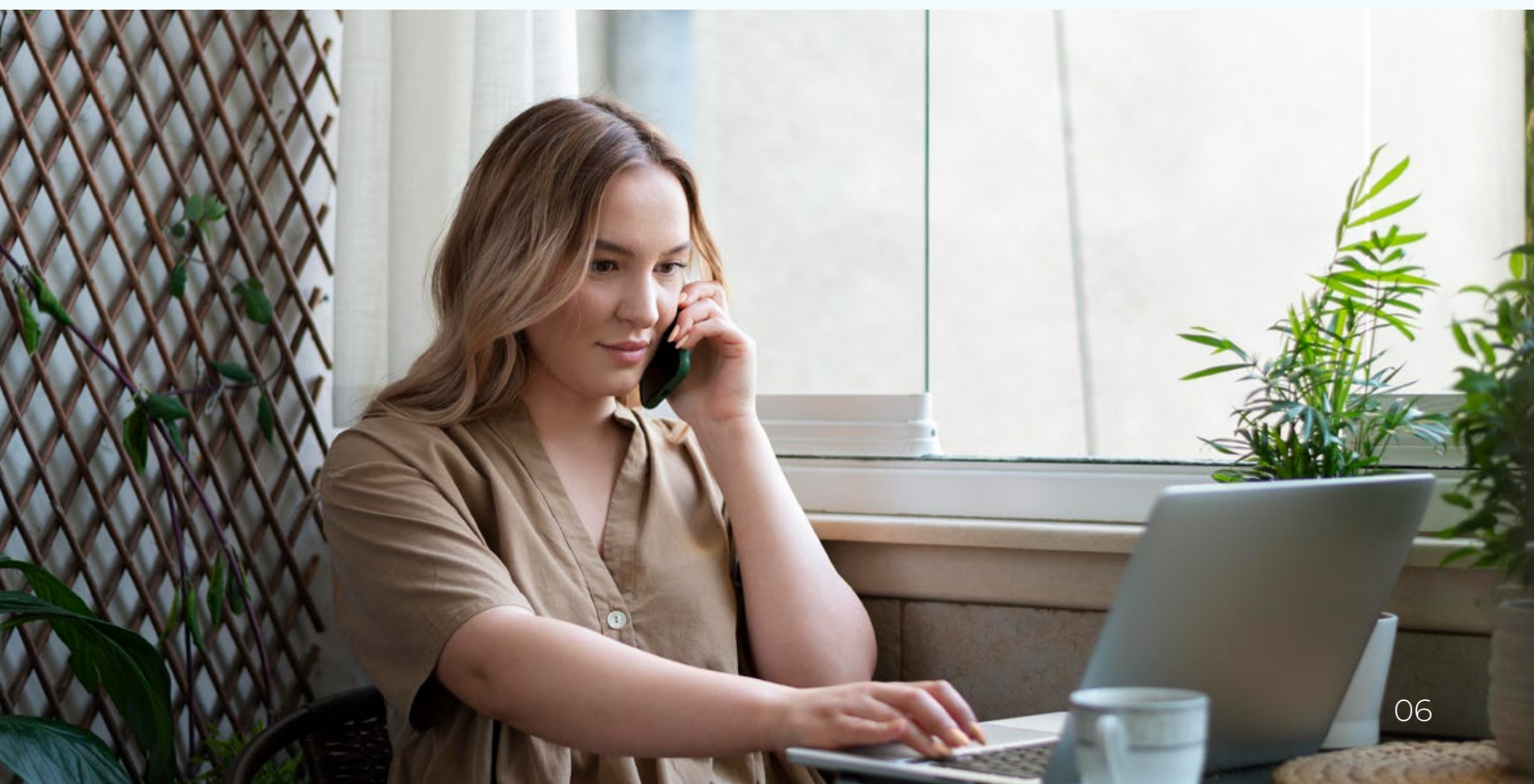
There is a FAQ section on the System that can assist you on the following topic.

1. [How to I log a support call?](#)
2. [How do I know what all the buttons and options do on iTest?](#)
3. [How do I setup my Switch on iTest?](#)
4. [How do I setup my Switch to allow calls from iTest?](#)
5. [How do I setup my suppliers on iTest?](#)
6. [How do I load Countries, Breakouts and Dial codes onto iTest?](#)
7. [How do I upload my test numbers?](#)
8. [Why are all my breakouts not shown?](#)
9. [How to manage my NDB?](#)
10. [How do I make a standard test to manually inserted numbers?](#)
11. [How do I make a standard test to numbers from my NDB?](#)
12. [What do the test results mean in iTest?](#)
13. [How do I share my Test results with external parties?](#)
14. [How do I schedule tests?](#)
15. [How do I export / import schedules](#)
16. [How do I use Interconnect tests?](#)
17. [How do I use SIP phone registration?](#)
18. [How do I set up SMS Testing?](#)
19. [How do I initiate an SMS test?](#)
20. [How do I configure my own SMS test template?](#)
21. [How do I administer users?](#)
22. [What is the difference between a Users and Company Admin?](#)
23. [How do I use the Reports?](#)
14. [How do I schedule tests?](#)

## Initiating a One-Off Test

### Select the “Test Voice” tab on the top Banner

1. Select the Voice Profile you wish to use, if you only have a single Switch configured on the System it will default to your configured Profile automatically
2. Select the Supplier you wish to test from the “Supplier List” drop down list
3. The “Supplier Multi-select” option allows you to select multiple Suppliers so that you can test multiple suppliers within the same test to save you the effort of having to duplicate running multiple tests on the same destinations
4. Select the Test Type you wish to run – either Standard or Advanced
5. Select the Country and Network (Breakout) that you wish to test, you can search for a particular country by starting to type the country name in the “Search” bar and it will narrow the options where you can then select the specific Breakouts from the drop down list
6. The Multi Select option allows you to select multiple Breakouts that you can test from within the same test to save you the effort of having to duplicate running multiple tests to the various Breakouts
7. Codec –the codec will default to the codec configured for that Supplier, you may force a specific codec to be utilized by selecting an alternative codec from the selection box
8. ANI – If left blank (default) the system will randomly generate an 11 digit number. To specify an ANI simply type in a number within the ANI Field. You can specify digits and or use the wildcard of “x” within the ANI field and the platform will randomly insert a number between 0-9 to replace the “x” wildcard
9. Call Quantity – Select number of calls you wish this test to comprise of. If you have selected a Standard test the numbers being used will be displayed within the Manual Numbers box
10. Press the “Test” button and this will initiate your test to run immediately





## Summary Information for All Test Results

- **Time Initiated** - the Date and Time (as set by the iTest Account time zone) the first call in the test was initiated displayed in Month, Day Number format then 24 hours clock format displayed to hundredths of a second
- **Initiated by** - iTest User Account that initiated the Test
- **Supplier Name** – Name of the Supplier that the test is run against
- **Profile Name** – The Switch / Profile name the test was run on
- **Test Name** - The Country / Breakout the test was run against, or the name of the test
- **Codec utilised** – The codec utilised for this test
- **Source Number / Test Type** - The ANI/A Number/Source Number of the first test call in a Standard Test or the Text "Advanced / CLI" to identify the test results for an Advanced / CLI test
- **Total Test Calls** – Total test calls within a single Test
- **Completed Test Calls** – Test Calls that have been Completed so far
- **Successful Test Calls** – Test Calls that have been Successful so far (For a Standard Test this reports the number of test calls that have connected successfully, in Advanced/CLI Tests this reports the test calls that have successfully passed CLI correctly)
- **Not Answered Test Calls** – Test calls that have not been answered, or Test Calls that have not been answered within the specified Ring Time
- **Failed Test Calls** – Test Calls that have Failed so far (For a Standard Test this reports the number of test calls that have not connected, in Advanced/CLI Tests this reports the Test calls that have not passed CLI correctly)
- **Average MOS over Entire Test** - The Average MOS (Mean Opinion Score) for that Test as taken from all connected Test Calls
- **Average PDD over Entire Test** - The Average PDD (Post Dial Delay) for that Test as taken from all Test Calls

## Standard Test Results Details

- **Time Initiated** – the time (as set by the iTest Account time zone) the Test call was initiated displayed in 24 hours clock format displayed to hundredths of a second
- **Destination Number** – The Destination Number/B Number/Dialled Number being called on that Test Call
- **State** - the condition of the current Test Call
  1. Queued – Current Test Call is queued awaiting the next available time slot on the Dialler
  2. In Progress – Current Test Call is in progress
  3. Complete – Current Test Call has been Completed
- **PDD – Post Dial Delay**
  1. Reported PDD – The time in seconds, displayed to hundredths of a second, between the Test Call being initiated and receiving the 18x message
  2. User PDD - The time in seconds, displayed to hundredths of a second, between the Test Call being initiated and first hearing an RBT (Ring Back Tone)
- **Ring Duration** - The time in seconds, displayed to hundredths of a second, that the Test Call is in the Ringing Phase (before charging / connection commences)
- **RBT Recording** - (Standard Tests only\*) An MP3 recording of the entire Ring Duration, including any PDD – downloadable, shareable, and playable within the Browser
- **Call Duration** - The time in seconds, displayed to hundredths of a second, that the Test Call is in the Connected Phase (The chargeable / connected element of the call)
- **Call Recording** - (Standard Tests only\*) An MP3 recording of the entire Connected Call – downloadable, shareable, and playable within the Browser
- **RTP Statistics** - RTP (Real-time Transport Protocol) information
  1. Packets in – The number of packets received inbound
  2. Packets Out – The number of packets sent outbound
- **MOS** – MOS Score (Mean Opinion Score) a number, to 2 decimal places, between 1.00-5.00 (1 = Bad, 5 = Good) that reflects the impairment/quality of the network the Test Call was carried over.
- **RTP Packets** – Total RTP (Real-time Transport Protocol) packets Sent(Out) and Received(In)
  1. Out of Order - The number of IP Packets that were received in a different Order / Sequence to what they were sent
  2. Lost Packets – The Number of Packets that failed to reach their destination.
- **Packet Jitter** - The variation in latency as measured in the variability over time of the packet latency across the network, a term used to measure Quality of Service (QoS)
- **Disconnect Initiator** – The Party that initiated the Disconnect Phase of the Call, either the Originator (the iTest dialer at the A End of the Call) or the Terminator (the person or equipment at B End of the Call)
- **Final SIP Code** – The final SIP Message received by the iTest system, as sent by the Customers Profile/Switch.



- **Abbreviated SIP Ladder** – a summary list of the SIP Messages Received along with the second they were received (to the ten thousandth of a second)
- **Result** – The result status of the Test Calls
  1. Call Success – The Test Call connected successfully
  2. Call No Answer – The Test Call was not Answered within the Configured Ring Duration
  3. Call Failed – The Test Call Failed to connect successfully
- **Dead Air** – Packets with no sound information have been detected within the Test Call – note this is not the same as Silence, Silent Packets have sound information within them.
- **Pos FAS** – Possible FAS (False Answer Service) has been detected, whereby Ring Back Tone is suspected to be contained within the chargeable / connected Phase of the Call
- **No RBT** – No audible RBT (Ring Back Tone) has been detected prior to the Chargeable / Connected Phase. Either no 183 message has been received with audio information, or if there has been audio packets for the ringtone nothing has been detected in them except silence.
- **Log** – A detailed SIP Ladder in chronological order showing the SIP messages and RTP information of the Test Call, downloadable as a; text file \*.TXT, WireShark Trace file \*.PCAP, or Web Browser file \*.HTML





## Advanced/CLI Test Result Details (same as Standard Test Results plus...)

- **Result** – The Result showing the CLI status of the Test Call
- **CLI Result** –
  - CLI Success - The CLI was presented successfully, including any configured allowable CLI prefixes
  - CLI Failed – The CLI was not presented successfully
  - CLI Number Presented – Displays the CLI presented in Green or Red numbers, Green numbers indicate a correct number in the correct location, a Red number indicates a wrong number presented in the wrong sequence.
- **Number Sent** – The CLI/A Number/ANI/Source Number Sent by the System Dialer
- **Number Presented** - The number received by the Testing equipment
- **Detailed Early Charging FAS** – The System has identified that the call duration for the connected part of the call as recorded by the answering equipment(Testing Node), differs to the call duration as recorded by the System Dialer, and identified this call as being possibly an instance of Early charging FAS. The System shows the time the call was answered as recorded by the answering equipment, the time the call was recorded as connected by the System Dialer and the difference in connection times displayed in Seconds to the nearest hundredth of a second.
- **Detailed Late Charging FAS** – The System has identified that the call duration for the connected part of the call as recorded by the answering equipment (Testing Node), differs to the call duration as recorded by the System Dialer, and identified this call as being possibly an instance of Late Charging FAS as the disconnect times differ. The System shows the time the call was disconnected as recorded by the answering equipment , the time the call was shown as disconnected by the System Dialer and the difference in the disconnection times displayed in Seconds to the nearest tenth of a second.
- **Terminated Elsewhere** – The System has identified that the Test Call has been connected/answered, but that the Test Call could not be verified as being answered by the System equipment located at the destination dialed (Testing Node). The System displays a recording of the audio element of the connected Test Call to aid with further investigation and diagnosis.
- **Con Error** - This error occurs when there is a Connection Error between the System and your Profile/ Switch – Share this Error with [support@i-Test.net](mailto:support@i-Test.net) if you see this error.

## Automated Monitoring and Alerting Instructions

Instructions on using your Testing Account for initiating Automated Recurring Tests (Monitoring tests) and setting up Alerting using the Outbound Voice Testing Platform. You can use the Scheduler to run a test at specific time, to repeat that test at specified intervals and to turn on and setup Alerting (under your specified conditions).

## Instructional Videos

Initiating a Standard Test [▶ Watch](#)

Displaying Test Results [▶ Watch](#)

Sharing Test Results [▶ Watch](#)



## Select the “Scheduler” tab on the top Banner

The Scheduler Screen will show a list of any Schedules that have been configured but still have repeat cycles left to run, or have not yet run (Active Schedules). If this is your first Schedule being created the Scheduler will show the message “No Schedules Configured”

## Multiselect Destinations / Suppliers Note

It is suggested that customers setup Schedules selecting specific Suppliers and single Destinations/ Networks rather than using the multi select (Suppliers or Destinations) features until they have become confident with the System. A common user error is appreciating (underestimating) the compound volume of test calls that can be inadvertently scheduled using the multiselect features.

1. **Click on the “Add New Schedule” text**, which will display the Schedule Editor in a new window.
2. **Select the Test Type you wish to run** – either Standard or Advanced/CLI for Outbound Voice Testing based on the type of test you want scheduled.
3. **Select the Voice Profile you wish to use**, if you only have a single Switch configured on the System it will default to your configured Profile automatically.
4. **Select the Supplier** you wish to test from the “Supplier List” drop down list.
5. **The “Multi-select” option** allows you to select multiple Suppliers within the same test schedule. \*Please see the note below\*

6. **Test Name** – You may name this Schedule or leave it blank whereby the System will automatically name the test by the County/Breakout selected.
7. **ANI** – If left blank (default) the system will randomly generate an 11 digit number. To specify an ANI simply type in a number within the ANI Field. You can specify digits and or use the wildcard of “x” within the ANI field and the platform will randomly insert a number between 0-9 to replace the “x” wildcard.
8. **Codec** –the codec will default to the codec configured for that Supplier, you may force a specific codec to be utilized by selecting an alternative codec from the selection box.
9. **Number Selection** – For Advanced Tests simply select the Country and Breakout (Network) from the drop downs that you wish to test. For Standard Tests you can either select the “Manual Number Entry” radial button and input (Copy/Paste) the numbers you wish to use, or select the “Number Database” radial button and simply select the Country and Breakout (Network) from the drop downs that you wish to test.
10. **Calls Per Test Quantity** – Select number of calls you wish this test to comprise of. If you have selected a Standard test and the “Manual Number Entry” radial button the numbers being used will be displayed within the Manual Numbers box instead.
11. **The Multi Select option** allows you to select multiple Breakouts that you can test from within the same test. \*Please see the note below\*
12. **Start Date** – select the Date and Time you wish the Schedule to run for the first/next time.
13. **Repeat** – On the “Run this Schedule” Drop Down you can select the number of Times the Schedule is repeated, and also the repetition Frequency (Mins, Hours, Days, Weeks, Month).
14. You may set different Frequencies to run the schedules in **Peak/Off Peak times**, you may also define any particular hour as either a “Peak” or “Off Peak” time.
15. If you select “**Until**” on the “**Run this Schedule**” Drop Down selector you will be shown a End Date calendar Box/Time to define when the Scheduler will cease running this test.
16. If you select “**Continuously**” on the “**Run this Schedule**” Drop Down selector, your tests will continue to run (at your defined repeat frequencies) until you cease the Scheduled Tests.
17. **Press the “Add Schedule” button.** This will create your Tests to run / rerun at your selected frequencies and return you to the Scheduler Screen.





## Alerting (Email Alerts from Scheduled Tests)

To setup Alerting on Scheduled Tests

1. **Select the “Scheduler” tab** on the top Banner and either open an existing Schedule by clicking on the “Edit” text next to the relevant Schedule, or click on the “Add New Schedule” text.
2. At the bottom left hand side of the Schedule Editor screen there is the **“Email Alerts” section**, click on the “Send Alerts” tick box to open up the relevant alerts available for your test type.
3. **The Alert Email field** is available for populating with any email address on your company email domain. The default email address shown is yours. If you wish the Scheduler email alerts to be sent to other or multiple parties within your organization you can select any email address or group email that is configured on your email system, i.e. individual@ noc@, tech@, operations@ etc.
4. **Select the Alerts** that you wish to be alerted on when they occur; Binary choices (Y/N) are shown as tick boxes with a Tick as the affirmative.
  - a. Alert on FAS - tick box
  - b. Alert on No RBT - tick box
  - c. Alert on Dead Air - tick box
  - d. Alert on Viber Termination - tick box
  - e. Alert on Call Fails greater than (this is a percentage box – state any number between 1-100) 75% for example
  - f. Alert on Average PDD greater than (this is a numeric field in whole seconds – input the number of seconds you want to be alerted on should the Average PDD exceed this figure) 5 for example
  - g. Alert on Average MOS less than (this is a numeric field for whole numbers – MOS is measured between a range of 1.0 to 5.0. 1.0 being poor, 5.0 being excellent. Input a whole number that you wish to be alerted upon when the Average MOS falls below this number) 4 for example.
  - h. Alert on CLI Failure - tick box (only visible if an Advanced/CLI type of test has been selected within the Schedule Editor)
5. **Select the “Save Schedule” Button** to make your Alerts Active

# Administering Schedules and viewing the Scheduler queue

## Select the “Scheduler” tab on the top Banner

**The Scheduler Screen** will show a list of any Schedules that have been configured but still have repeat cycles left to run, or have not yet run (Active Schedules). If there are no Active Schedules or your first Schedule has yet to be created yet the Scheduler will show the message “No Schedules Configured”.

**Active Schedules are always visible in the Scheduler screen.** The “Show Completed” tick box will toggle the visibility of Cancelled or Completed Schedules. A Cancelled Schedule was an Active Schedule that has been manually Cancelled. A Complete Schedule was an Active Schedule that has completed all of its repeat cycles, without being Cancelled manually.

**Cancelled or Completed Schedules** can be made Active again by selecting the “Re-Activate” text next to the Cancelled or Completed Schedule, this will bring up the Schedule Editor, once the “Save Schedule” button has been pressed at the bottom of the Editor the Schedule will become Active again.

**The “Lines” Drop Down selector** provides a mechanism to display a specified number of Schedules per Page

**The “Page” arrows and Drop Down selector** enables swift navigation across multiple pages of Schedules.

**The “Search” field** enables you to filter Schedules that only contain the characters you have specified within your Search in any of the Supplier, Schedule Name, Country or Network fields.

The Scheduler screen will show the Schedules and some abbreviated information on each Schedule, namely; Schedule Name, State, Date (Last run), Profile, Supplier, Test Type, Country/Network, Next Run, Frequency, Alert email, Alert conditions, and Actions

**Schedule Actions;** (Click the relevant text)

**EDIT** – Opens the Schedule Editor to edit the specific Schedule.

**CANCEL** – Changes the Schedule from “Active” to “Cancelled”

**DUP** – Opens the Schedule Editor with a duplication of the Schedule, when Save Schedule is selected it will create a second version of the original Schedule – with any changes made in the editor.

**The DUP (Duplicate) feature is a very quick way of creating multiple Schedulers quickly.**

For Example - If you want to monitor multiple destinations (Countries/Networks) from the same Supplier, you can create one Schedule based on the Supplier and one specific County/Destination, then select the DUP button next to the first Schedule, change the Country/Network and select “Save Schedule” – all other Schedule Settings will remain the same. You can also do a similar duplication and change the Supplier instead of the Destination/Network, if multiple Suppliers offer you the same Destination for example.

