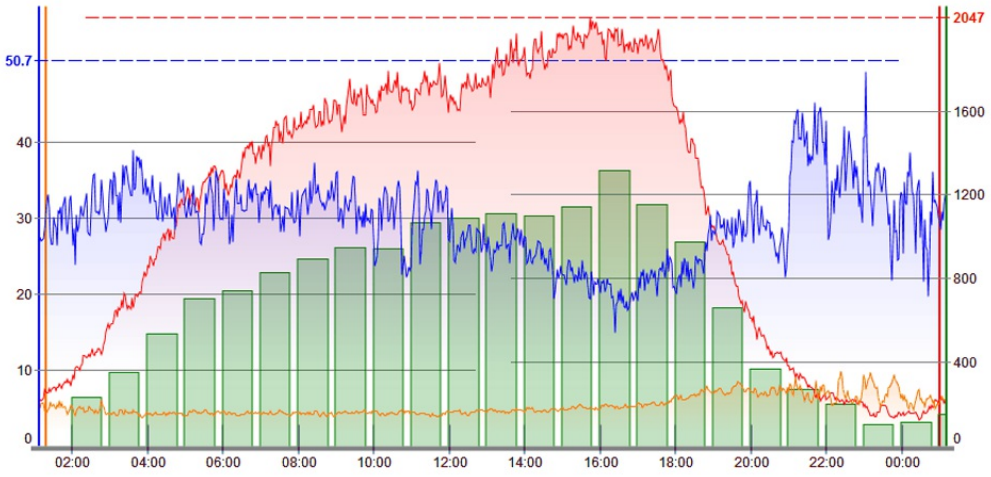
Route testing dialer



User manual

Product version: 2.3

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Route testing dialer

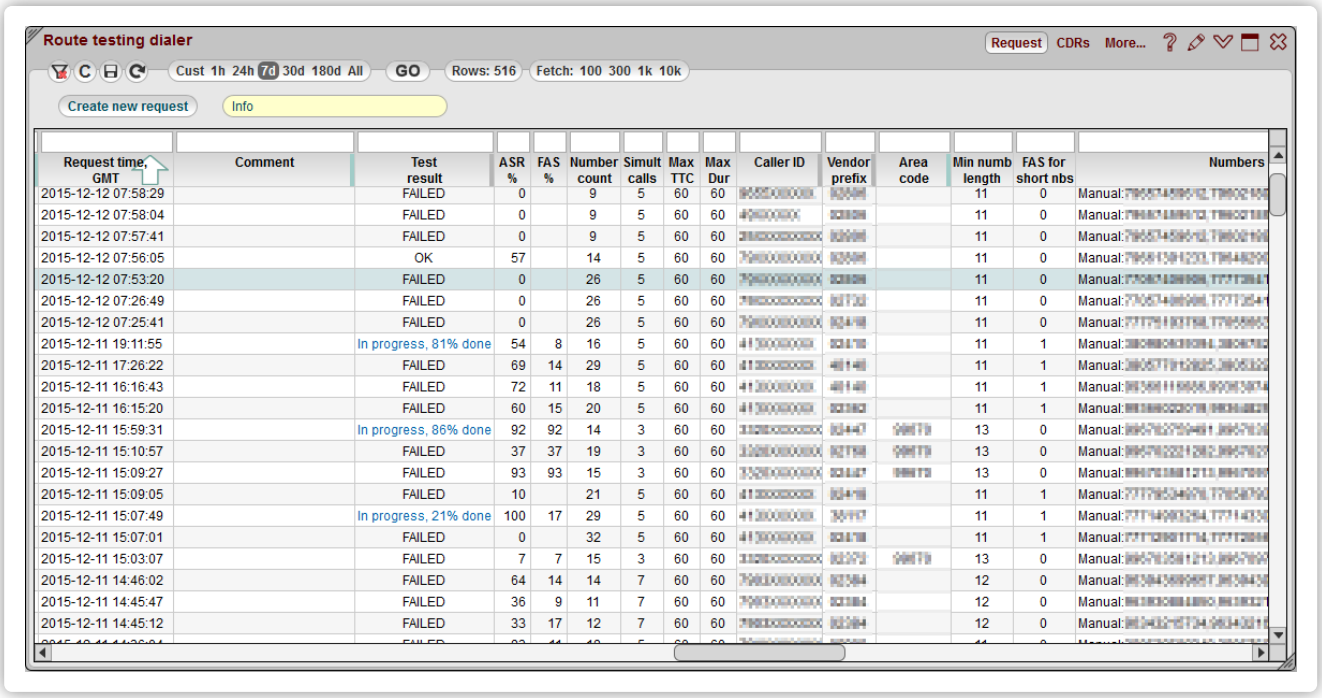
5gVision Route testing dialer is part of the 5gVision suite of products for monitoring, alerting, packet sniffing, rate management, routing, and billing that share a common web interface: quick, intuitive, and flexible.

Overview

The best way to start with the dialer and understand its main concepts is to view this sales presentation:

5gVision Route testing dialer

This module lets you test routes via dialing certain auto-generated or manually entered numbers through a particular vendor you need to test. The dialer can be located right on your 5gVision server, or on a separate hosting server. The dialer calls your switch(es) and your switch routes calls to the vendor being tested based on the called number prefix.



To access the dialer, please create a **Route testing dialer** screen (see Screen types for information on how to add it).

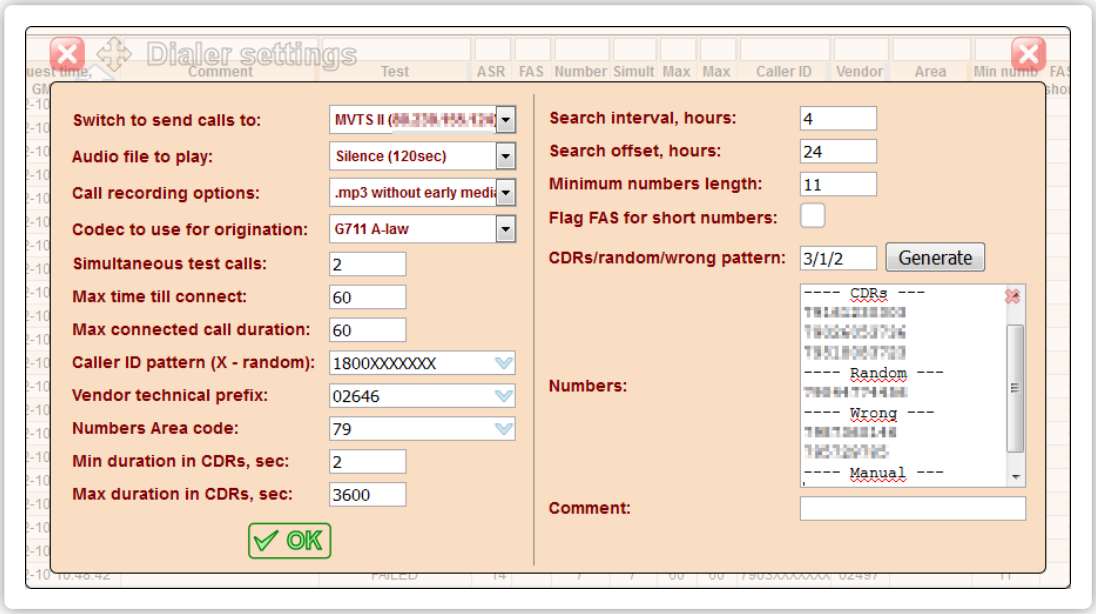
The **5gVision** interface principles are described in a separate manual: User interface

You may download a PDF version of the manual here: User interface

If you are new to 5gVision, we would recommend to go through at least the begiing of the Interface manual first.

Making requests

To make a request, click **Create new request**.



A new window will be opened with the following parameters:

- **Switch to send calls to** - from the drop-down menu, select one of your switches for the test calls to be routed to.
- **Audio file to play** - from the drop-down menu, choose the audio file to be played to a called party during each call in this test batch.
- **Call recording options** - from the drop-down menu, select the call recording options - .wav or .mp3, with or without early media. With the current implementation in case early media is chosen, the system starts playing and recording audio file right at the first ring (not after connect).
- **Used codec** - from the drop-down menu, select the codec used for the test calls.
- **Simultaneous test calls** - the number of simultaneous calls to test numbers in a batch. The hardcoded maximum is set to 20 as a precaution so that the user does not overload the system by accidentally typing in a large number.
- **Max time till connect** - maximum waiting time till the call connects, in sec. When the waiting time is exceeded, the call gets disconnected.
- **Max connected call duration** - a maximum duration of a connected call, in sec.
- **Caller ID pattern (X - random)** - caller ID (where X will be replaced by a number randomly generated for each call in the test batch, Y - by any number from 1 to 9). Clicking the blue arrow will open a Value selection window which can be used to quickly select a pre-saved number.
- **Vendor technical prefix** - technical prefix added to each called number. Clicking the blue arrow will open a Value selection window which can be used to quickly select a pre-saved number.
- **Numbers Area prefix** - area prefix used to generate called numbers in the specified area (see **CDRs/random/wrong** below). Clicking the blue arrow will open a Value selection window which can be used to quickly select a pre-saved number.
- **Min duration in CDRs, sec** - when the system selects destination numbers from CDRs, it will only consider CDRs with the duration over the minimum. Valid only if the CDR count in the **CDRs/random/wrong pattern** parameter is greater than 0.
- **Max duration in CDRs, sec** - when the system selects destination numbers from CDRs, it will only consider CDRs with the duration less than the maximum. Valid only if the CDR count in the **CDRs/random/wrong** parameter is greater than 0.
- **Search interval, hours** - when the system selects destination numbers from CDRs, it will consider the CDRs within the latest N hours. Maximum interval - 24 hours.
- **Search offset, hours** - an offset for searching CDRs for destination numbers. For example, if the current time is 10:00, the search interval is 4 hours and the offset is 1 hour, the system will search through CDRs within the 5:00 - 8:59 period.
- **Minimum numbers length** - a minimum valid numbers length for tested prefix(es). Needed to generate random (equal to this length) and wrong(less than this length) numbers. Does not affect numbers extracted from CDRs.
- **Flag FAS for short numbers** - the checkbox that controls whether the system will treat connects to wrong numbers shorter than the **Minimum numbers length** as FAS-terminated attempts.
- **CDRs/random/wrong pattern** - define the count of real numbers (taken from CDRs)/random numbers/intentionally wrong numbers to be tested. Click **Generate** to fill out the **Numbers** field according to the defined pattern.
- **Numbers** - list of destination numbers to be tested. May be entered manually or generated automatically with the help of the **CDRs/random/wrong** field. Numbers may be delimited through commas. When composing the number lists, any symbols other than a figure, a comma, * or # sings are discarded.
- **Comment** - comment for the test batch.

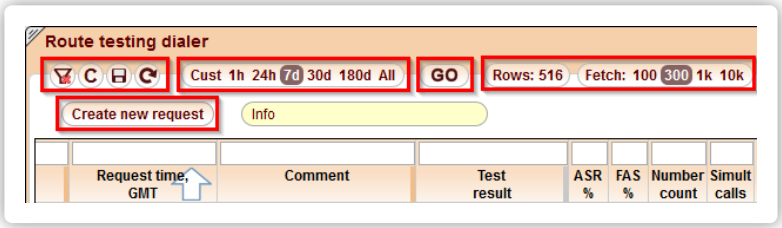
To exclude calls to the same number within a certain time period (48 hours by default), the following methods will be employed:

- duplicate numbers are excluded when CDR-based numbers arrive from the DB,
- if the numbers window had some numbers, and another batch of numbers was requested - the new numbers will be unique,
- any numbers that had alerting (rings) in the last 48 hours in the dialer CDRs will be excluded when fetching new numbers from the switch CDRs.

To start the tests, please click **OK**.

Route testing menu

The menu on top of the Route testing screen consists of the Table menu, the interval selector, the row count selector and the **Create new request** button.

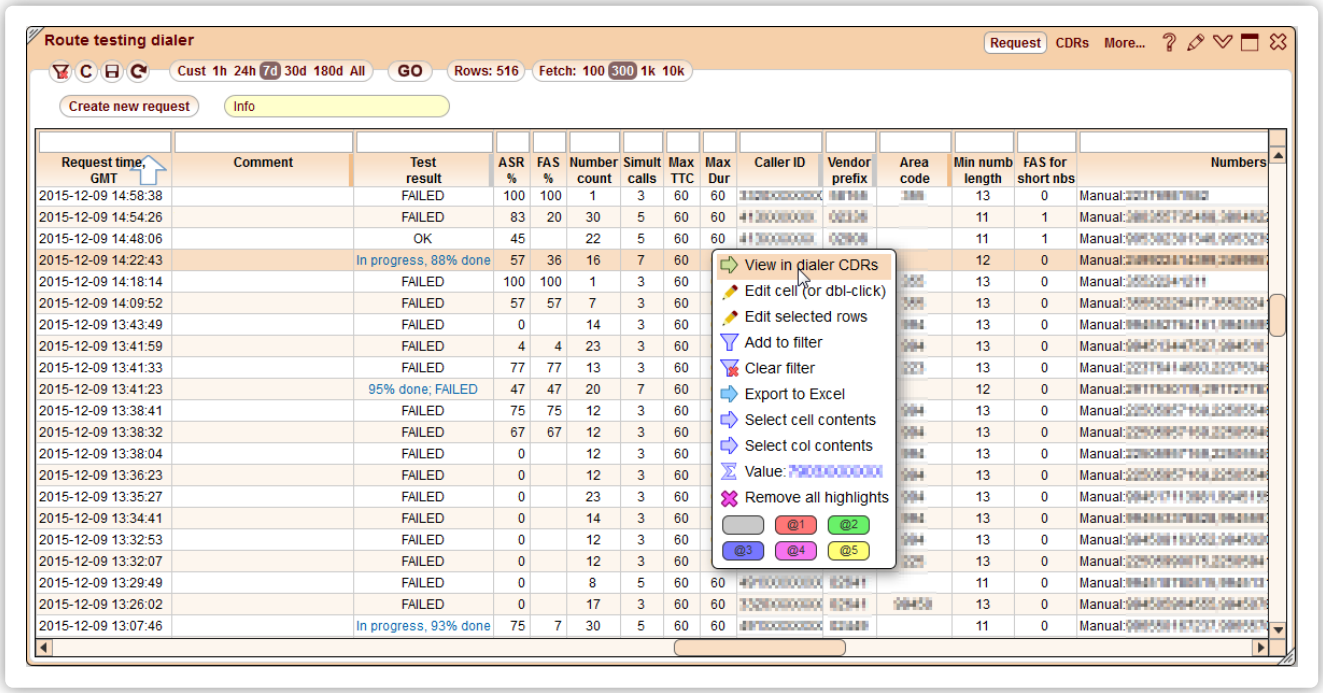


The interval selector allows you to limit the number of test batches fetched from the DB to those belonging to the latest period only (1h, 24h, 7d, etc), while the row count selector limits them to only the top X rows.

To apply the settings of the selectors, click **GO**. The **Rows** label shows the current number of rows displayed with filters applied.

Testing results table

The test results are displayed in a table. All 5gVision table capabilities are supported (like Filtering, Column selection, Column resizing, Export and more).

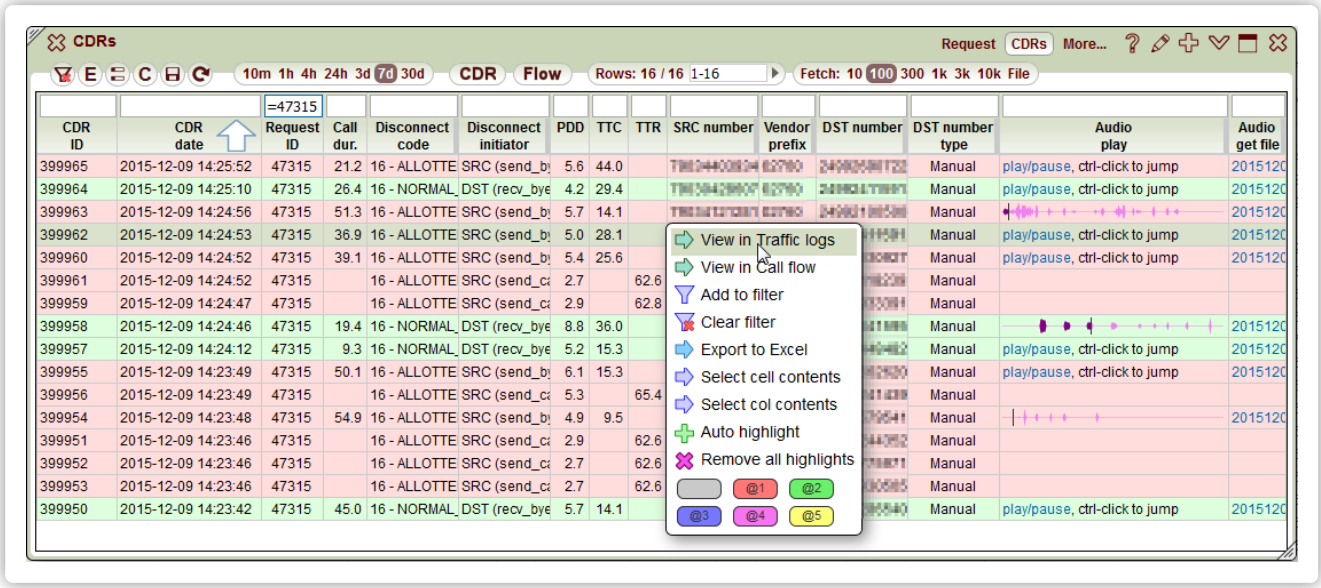


The key column here is **Test result** which contains the status of the test (% done, OK or FAILED). The test is considered a success if the ASR value was above a preset threshold and there were no calls with FAS. Otherwise it is a failed test. ASR value and a percent of FAS-terminated attempts are displayed in the **ASR %** and **FAS %** columns respectively.

The system considers an attempt to be FAS-terminated in the following cases:

- The call connected to an incorrect number.
- The call disconnected as the maximum duration time was exceeded.

If you invoke the pop-up menu on the desired test record and select **View in dialer CDRs** (or simply double-click the row), the system will open a new CDR window filtered to display only the calls pertaining to the test.

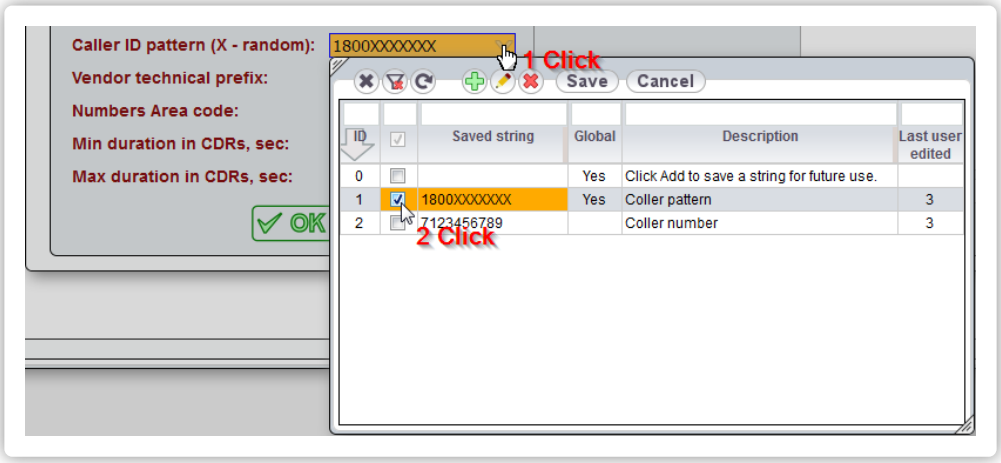


Apart from usual CDR parameters, this window contains the **Audio get file** column hosting a link to the recorded call and **Audio play** where you can playback the recording directly in the browser (if call recording was enabled during request creation).

It is also possible to view Signaling logs and Call flow diagram (see Signaling collector) of the test call from this window by selecting the options **View in Traffic logs** and **View in Call flow** respectively in the pop-up menu.

Value selection window

The number selection window is a handy tool to enter a pre-saved value into any of the **Options** menu fields (for instance - **Create new request** in Dialer). It contains a table with the list of numbers that may be routinely used in your system.



To add a new number, press the green **+** in the toolbar. A new row will be added to the table, where you can specify the number, description, and set the **Global** flag. If the number is flagged global, it will be available to all users of the system; otherwise it is available to the current user only. When done, click **Save**. You may also edit and delete rows from the table.