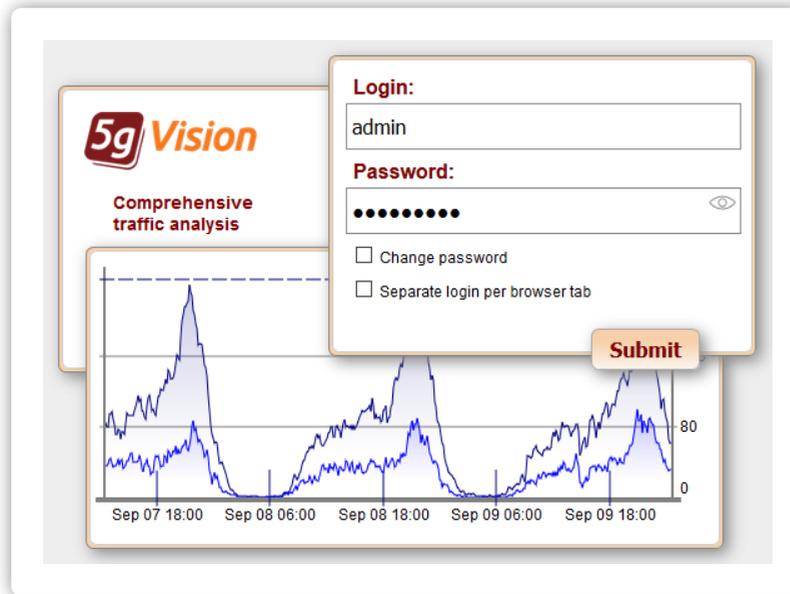




# Monitoring Quick Start Guide

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Break through your data



Once **5gVision** is installed and you are provided a link to its interface, you will see a login window.

Enter the **username** and **password** that were communicated to you by 5gVision support engineers to log on.

- [-] User Manual
  - [?] User interface
  - [?] Monitor
  - [?] Traffic collector
  - [?] Rate management
  - [?] CDR comparison
  - [?] Route testing dialer
- [-] Data screens
  - [+] Total calls
  - [+] Cust / Vend ACD
  - [+] Area ACD
  - [+] Report
  - [+] Alerts
  - [+] CDRs
  - [+] VoIP Traffic analysis
  - [+] SNMP stats
  - [+] Poller internal stats
- [-] Received screens
- [-] Configs
  - [+] Config: Users
  - [+] Config: System
  - [+] Config: SIM
  - [+] Config: External DBs
  - [+] Config: Alerts

First and foremost, we recommend you to **change the password** for the **Admin** user.

In order to do it, navigate to **Config:Users**, select the **Users** table, double-click in the **Password** cell for the **Admin** user and enter a new password.

When done, click the green **Save** button to save the changes.

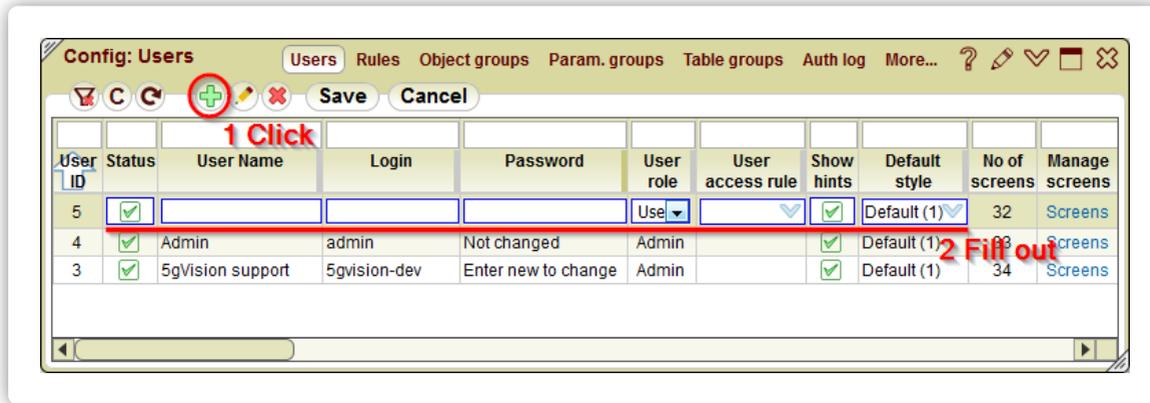
Please note, that apart from the **Admin** user, the freshly installed System has a **5gVision support** user that 5gVision engineers employ to interact with your instance whenever it is required.

**Config: Users** Users Rules Object group

Save Cancel

User ID	Status	User Name	Login	Password	User role	User access rule	Show hints	Default style	No of screens	Manage screens
3	<input checked="" type="checkbox"/>	5gVision support	5gvision-dev	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">+</span> new to change	Admin		<input checked="" type="checkbox"/>	Default (1)	34	<a href="#">Screens</a>
4	<input checked="" type="checkbox"/>	Admin	admin	Inew!secure@pass	Admin		<input checked="" type="checkbox"/>	Default (1)	33	<a href="#">Screens</a>

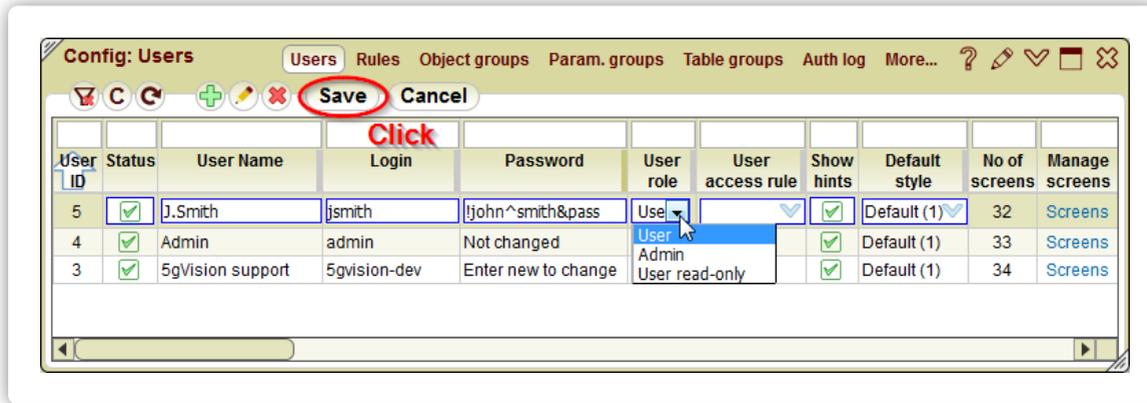
2 Double-click on cell and change



The ideology of 5gVision is that each user will have his or her own settings and environment, including the custom-built menu on the left, block sizes, table filters, etc. Moreover, only one user may work with the system under the same login at a time.

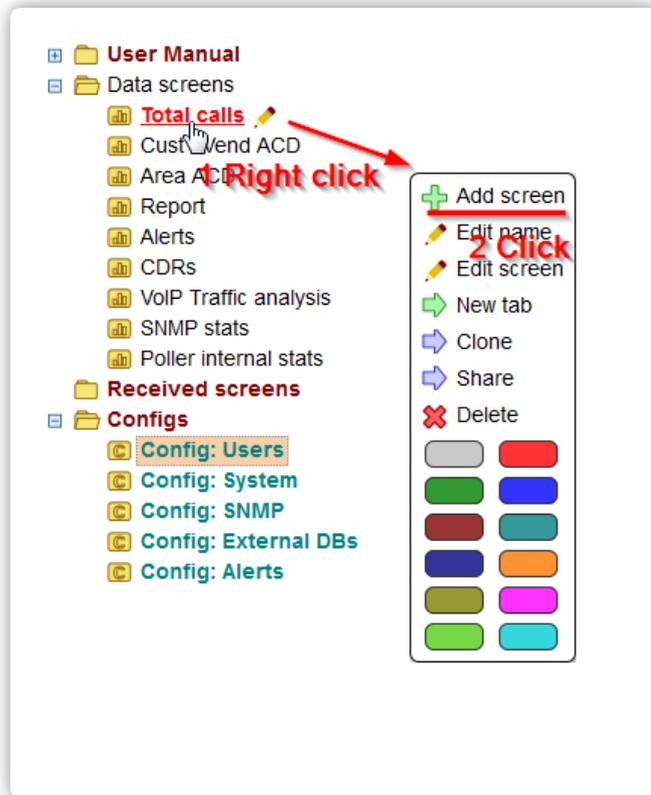
We thus highly recommend to create a **separate login** for each person that will be using the system.

To add a new user, please press the **green plus** in the **Config:Users -> Users** table.



- **User name** – the displayed name of the user.
- **Login** – user login for web authentication.
- **Password** – user password.
- **User role** – choose whether the newly added user will be an **admin**, an ordinary **user** or a **read-only user**. **Admin** users are granted access to all screens, including system-wide config tables. A common **User** gets access only to statistical screens and the manual. **Read-only users** will be additionally prevented from saving any changes they make to their environment, but allow several connects under the same login.
- **User access rule** – define which objects, parameters or tables will be available to this user. Blank field means non-restricted access (apart from role restrictions). For further information, please refer to the manual.

When done, click the **Save** button. Or **right-click** on any cell to access the **Save** option quicker.



From the user's point of view, 5gVision is comprised of a multitude of **screens** which, in turn, consist of blocks. A **block** is a window-like area on the right used to display a certain type of information.

By adding new screens you may create a complex and convenient monitoring environment for yourself (other users are not affected).

For instance, you may want to create a separate screen for each VIP customer or area you have to access their stats in one click.

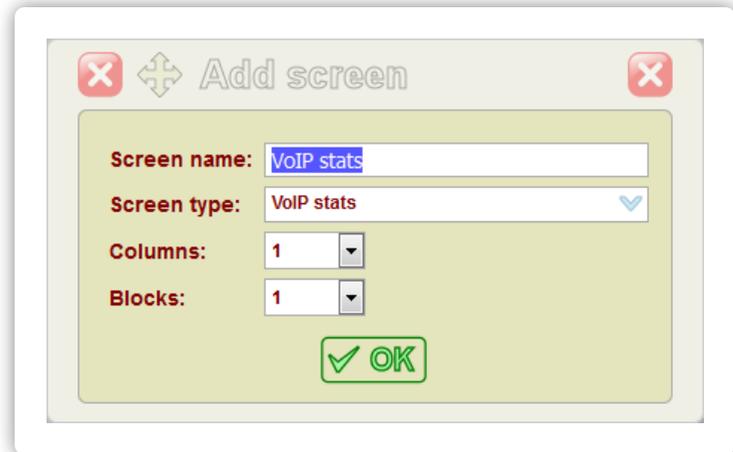
To add a new screen to the tree, right-click on any menu item and select the **Add screen** option. You may also click on a little pencil that is popping up whenever your mouse is over an item.

In the **Screen name** field, enter a name that will reflect the purpose of the screen you are creating.

In the **Screen type** listbox, select a certain screen or a folder of screens. Each screen belongs to a certain type which regulates what kind of modules and information is available in it. The **VoIP stats** screen consists of the most common monitoring modules: Charts, Tables, Reports, CDR, etc.

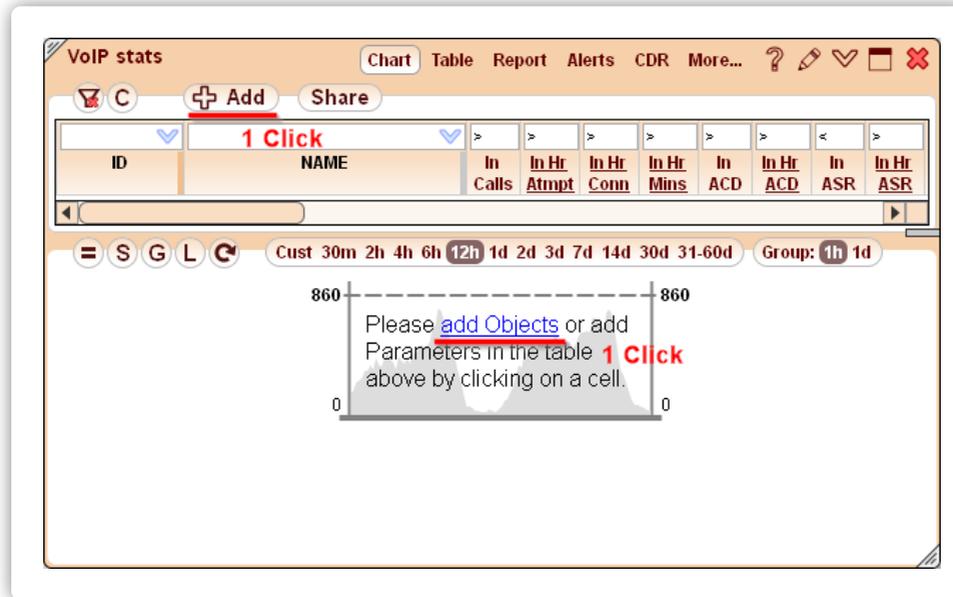
In the **Columns** listbox, select the number of columns in the new screen. In the **Blocks** listbox, select the number of blocks.

You may choose to have several blocks per screen to mix modules of different types on the same screen, for instance, in order to see Charts and Reports at the same time.



The screenshot shows a dialog box titled "Add screen". It contains the following fields and controls:

- Screen name:** A text input field containing "VoIP stats".
- Screen type:** A dropdown menu with "VoIP stats" selected.
- Columns:** A dropdown menu with "1" selected.
- Blocks:** A dropdown menu with "1" selected.
- OK button:** A green button with a checkmark and the text "OK".



The screenshot shows a dashboard titled "VoIP stats" with a "Chart" tab selected. The dashboard includes a table with the following columns: ID, NAME, In Calls, In Hr Atmpt, In Hr Conn, In Hr Mins, In ACD, In Hr ACD, In ASR, and In Hr ASR. The table contains one row with the value "1 Click" in the NAME column. Below the table is a chart area with a message: "Please [add Objects](#) or add Parameters in the table **1 Click** above by clicking on a cell." The chart area also has a time range selector set to "1h 1d" and a "Group" dropdown set to "1h 1d".

Once the screen is created, it will contain one or more blocks. By default, the block will display the **Chart** module.

To see the actual chart, though, we need to choose one or more objects (Customers, Areas, etc.) that will be the source of data for plotting. Please click the **add Objects** link or the **Add objects** button.

Object select

Comb: ca cac cc cr ar car ThisHr 2h 3h

ID	NAME	In Calls	In Hr Atmpt	Out Calls	Out Hr Atmpt
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	649	33.9K
c01.2188	Lobster telecom	309	9821	-	-
a5379	Green country	184	2663	-	-
c01.02	Beer telecom	-	-	-	15
c01.2215	Gigantic telecom	-	-	184	7527
a4769	Purple country	-	1882	-	-
a5849	Black country	10	690	-	-
a4985	Cold country	9	513	-	-
a5689	Cold country South	10	368	-	-
a5889	Black country proper	4	330	-	-
a5373	Yellow country South-West	40	309	-	-
a4975	Yellow country South	7	228	-	-
a5329	Yellow country Seaside	19	217	-	-
a4977	Yellow country East	5	216	-	-
a3005	Bluish country North	4	106	-	-

1 Select

2 Move

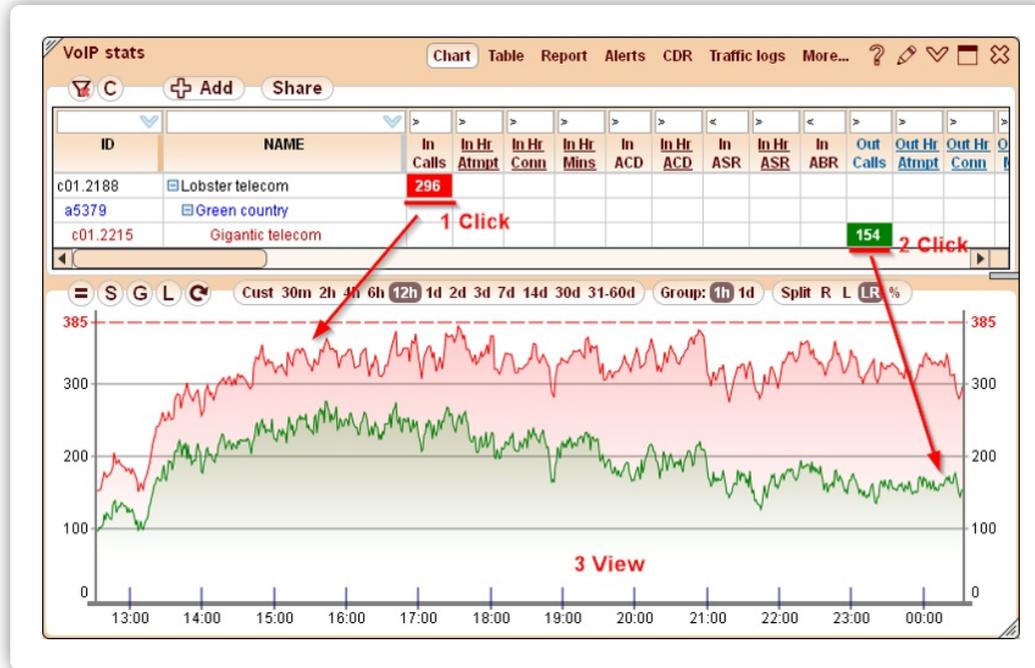
ID	NAME	In Calls	In Hr Atmpt	Out Calls	Out Hr Atmpt
c01.2188	Lobster telecom	309	9821	-	-
a5379	Green country	184	2663	-	-
c01.2215	Gigantic telecom	-	-	184	7527

3 Apply

The System will display a new window where you can choose the objects to be used to draw the charts.

Select the required objects by dragging your mouse over the left pane, and move them to the right pane with the help of the big blue > button. To facilitate your choice, this window also displays some basic statistical information on the objects.

Once done, click **OK**.



The System will show the added objects in the **legend table** above and will draw one default chart in the **chart canvas** below (usually the Active calls).

You may select more parameters you wish to see by clicking in the **intersection** of the parameter column and the row of a given object. The System will highlight the parameter, output the current value and show its graph in the chart canvas. Click again to remove a chart.

The screenshot shows the 'VoIP stats' interface with a 'Column select' dialog open. The dialog has two panes. The left pane shows a list of columns with checkboxes. The right pane shows the selected columns. A red circle highlights the 'C' button in the legend table menu. A red arrow points from this button to the 'Column select' dialog. In the dialog, the 'In PDD' parameter is selected in the left pane, and a red arrow points to its checkbox. A green checkmark button is also visible.

Default order	Table order	Column name	Description
4062		In Hr.DC2	Incoming % of custom disconnect codes 2 pe
4063		In Hr.DC3	Incoming % of custom disconnect codes 3 pe
5000		IN PDD-type parameters	
5044	11	In PDD	Incoming Post Dial Delay (setup->alerting)
5045		In Hr.PDD	Incoming Post Dial Delay per hour
5046		In Hr.TTC	Incoming Time To Connect (setup->connect)
5047		In Hr.TTC	Incoming Time To Connect, per hour
5048		In Hr.TTR	Incoming Time To Reject (setup->disconnect)
5049		In Hr.TTR	Incoming Time To Reject per hour
5050		In Hr.src.TTR	Incoming TTR per hour for calls disconnected
5051		In Hr.dst.TTR	Incoming TTR per hour for calls disconnected
5052		In Hr.sw.TTR	Incoming TTR per hour for calls disconnected
6000		IN Other VoIP parameters	
7000		IN Histograms	

Table order	Column name	Description
1	ID	Object ID, the first letter shows the object type
2	NAME	Object Name
3	In Calls	Connected incoming active calls
4	In Hr.Attempt	Total incoming attempts per hour
5	In Hr.Conn	Connected incoming calls per hour
6	In Hr.Mins	Duration of all incoming calls per hour (min)
7	In ACD	Incoming ACD by EMA (per window of calls)
8	In Hr.ACD	Incoming ACD per hour, min
9	In Hr.ASR	Incoming ASR per hour, %
10	In Hr.ABR	Incoming Answer-Bid Ratio per hour, %
11	In PDD	Incoming Post Dial Delay (setup->alerting)
12	Out Calls	Connected outgoing active calls
13	Out Hr.Attempt	Total outgoing attempts per hour
14	Out Hr.Conn	Connected outgoing calls per hour

You may be not satisfied with the default column selection of the chart (or any other module for that matter). To change it, click the C button in the **legend table menu** (or right-click on any column header).

The System will open a window where you may customize the displayed columns. Suppose you also want to visualize the incoming **PDD**. Find the parameter in the left pane and activate the checkbox. The parameter will appear in the right pane with active columns. Click the **green tick** button to apply the changes.



A new parameter will be added to the chart legend table, and you may then click on this parameter cell to fetch the chart data.

Suppose, you want to monitor **recent data** from your switch in a **tabular style**, allowing you to view lots of objects and parameters at the same time.

ID	NAME	In Calls	In Hr	In Hr Conn	In Hr Minis	In ACD	In ACD	In ASR	In ASR	In ABR	Out Calls	Out Hr	Out Hr Conn	Out Hr Minis	Out ACD
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	20.3K	4.96	5.13	46.5	45.1	15.4	649	33.9K	5942	20.3K	4.96
a5379	Green country	319	8072	2726	10.2K	5.47	5.62	54.4	52.7	33.4	319	18.1K	2726	10.2K	5.47

You can do this by simply switching the active module of the block to the **Table**.

Another way is to add a new block to the screen where you can display the table. To do so, right-click on the screen in the menu tree panel, select **Edit screen** and choose 2 in the **Blocks** listbox.

The System will display another block next to the existing one. In the new block, switch to the **Table** view.

1 Click

2 Select

3 Apply

The top screenshot shows a table with the following data:

ID	NAME	In Calls	In Hr Atmpt	In Hr Conn	In Hr Mins	In ACD	In Hr ACD
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	20.3K	4.96	5.13
a5379	Green country	319	8072	2726	10.2K	5.47	5.62
c01.2188	Lobster telecom	309	9821	2266	8752	5.68	5.79
e20877	Lobster telecom GW2	189	6202	1427	5576	6.21	5.86
e20879	Lobster telecom GW1	120	3619	839	3175	4.76	5.68
a5373	Yellow country South-West	81	1194	468	2067	6.61	6.62
c01.119	Sponge telecom	58	3728	665	2154	4.50	4.86
a3005	Bluish country North	55	1216	530	1773	4.36	5.02
c01.112	Huge telecom	48	3822	534	1675	4.86	4.70
a5379	Green country	31	1512	284	994	5.37	5.25
a5373	Yellow country South-West	10	113	35	158	6.46	6.78
a4979	Yellow country North	4	63	11	124	7.12	16.88

The bottom screenshot shows the same table after filtering for objects starting with 'c':

ID	NAME	In Calls	In Hr Atmpt	In Hr Conn	In Hr Mins	In ACD	In Hr ACD
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	20.3K	4.96	5.13
c01.2188	Lobster telecom	309	9821	2266	8752	5.68	5.79
c01.119	Sponge telecom	58	3728	665	2154	4.50	4.86
c01.112	Huge telecom	48	3822	534	1675	4.86	4.70
c01.171	Oversized telecom	43	3063	523	1534	4.32	4.40
c01.160	Pico telecom	32	1661	371	1029	4.34	4.16
c01.128	Big telecom	29	1235	215	1009	5.95	7.04
c01.2220	Tuna telecom	20	1041	244	721	4.33	4.43
c01.2222	Small telecom	18	592	107	313	3.79	4.39
c01.155	Cod telecom	17	1633	124	458	5.38	5.54
c01.2131	Enormous telecom	14	444	128	267	3.33	3.13
c01.03	Oyster telecom	13	448	184	518	4.17	4.22

By default, the **Table** module displays all kinds of objects that exist in the System – customers, vendors, areas, equipment, etc.

Oftentimes, however, you need to output only objects of a specific type.

The **Table** module (or any other module with tabular views) achieves it by applying filters.

**Filters** are located above the column headers.

Each object possesses an ID which contains an indication of the object type.

For example, customer/vendor IDs start with **c**, area IDs start with **a**, equipment IDs start with **e**, and so forth.

So, you simply need to **enter the letter** code of the object type in the **ID** column and the System will display the objects of this type only.

VoIP stats

Chart | Table

Comb: **ca** cac cc cr ar car ThisHr PrevHr 2h 3h

ID	NAME	In Calls	In Hr Atmpt	In Hr Conn	Out Calls	Out Hr Atmpt	Out Hr Conn
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	649	33.9K	5942
c01.2188	Lobster telecom	309	9821	2266	-	-	-
a5379	Green country	184	2663	1304	-	-	-
a5373	Yellow country South-West	40	309	139	-	-	-
a5329	Yellow country Seaside	19	217	112	-	-	-
a5249	Yellow country North-West	13	81	41	-	-	-

Customer -> Area

VoIP stats

Chart | Table

Comb: **ca** **cac** cc cr ar car ThisHr PrevHr 2h 3h

ID	NAME	In Calls	In Hr Atmpt	In Hr Conn	Out Calls	Out Hr Atmpt	Out Hr Conn
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	649	33.9K	5942
c01.2188	Lobster telecom	309	9821	2266	-	-	-
a5379	Green country	184	2663	1304	-	-	-
c01.02	Beer telecom	-	-	-	-	15	-
c01.2215	Gigantic telecom	-	-	-	184	7527	1304
a5373	Yellow country South-West	40	309	139	-	-	-

Customer -> Area -> Vendor

VoIP stats

Chart | Table

Comb: ca cac **cc** cr ar car ThisHr PrevHr 2h 3h

ID	NAME	In Calls	In Hr Atmpt	In Hr Conn	Out Calls	Out Hr Atmpt	Out Hr Conn
cTOTAL	TOTAL SYSTEM STATISTICS	649	34.1K	5942	649	33.9K	5942
c01.2188	Lobster telecom	309	9821	2266	-	-	-
c01.02	Beer telecom	-	-	-	-	15	-
c01.171	Oversized telecom	-	-	-	21	1187	139
c01.2205	Prawn telecom	-	-	-	1	30	13
c01.2206	Fish telecom	-	-	-	3	67	13

Customer -> Vendor

You may easily view various object combinations (say, customer->area) in Tables by clicking on a **plus sign** to the left of the object of interest.

There are quite a lot of different combinations in 5gVision, and sometimes looking at too many combination types in a table may be confusing and make it harder to find the information you need.

The **Combinations strip** allows you to choose which combinations will appear on screen when you open a parent object by clicking on a **plus sign**.

OBJECT 1 ID	OBJECT 1 Not defined	OBJECT 2 Not defined	OBJECT 3 Not defined	Time period beginning	In Hr Atmpt	In Hr Conn	In Hr Mins	In Hr ACD	In Hr ASR	In Hr A
ALL	=ALL=	=ALL=	=ALL=	Apr 06, 22:00	112K	13.2K	53.4K	6.08	41.1	
ALL	=ALL=	=ALL=	=ALL=	Apr 06, 21:00	95.0K	13.1K	50.9K	5.82	41.1	
ALL	=ALL=	=ALL=	=ALL=	Apr 06, 20:00	65.9K	12.7K	51.0K	6.03	42.8	
ALL	=ALL=	=ALL=	=ALL=	Apr 06, 19:00	66.2K	11.8K	43.8K	5.57	43.9	

A **Report** module provides for one of the most common ways in the industry to view statistical data - by getting a **per-hour** (or per-day, per-week) **list of parameter** values for each watched object or object combination.

Switch the block you are working with to the **Report** module, see above.

The report is empty because we first need to choose the objects we want, the interval, and the grouping, see the next slides.

This very screen shows only 5 modules on top – Chart, Table, Report, Alerts, CDR, however, there are much more! You may find it out by clicking the **More...** button.

The initial mode of the **Report** module is **Filter**. This mode is designed to let you choose the Objects or Object combinations for which to request a report.

The screenshot shows the 'VoIP stats' report interface in 'Filter' mode. The interface includes a navigation bar with tabs for 'Chart', 'Table', 'Report', 'Alerts', 'CDR', and 'More...'. The 'Report' tab is active. Below the navigation bar, there are controls for 'Cust ThisHr PrevHr 4h 6h 12h 1d 2d 3d 1w 2w 4w' and 'Group: 1h 6h 1d 1w All'. The 'Filter' button is highlighted, and a red arrow points to the 'GO' button. A red box highlights the '3 Create a report' button. The table below shows the filter settings and the resulting data.

OBJECT 1 ID	OBJECT 1 Cust/Vendor	OBJECT 2 Area	OBJECT 3 Vendor	Time period beginning	Out Hr Atmpt	Out Hr Conn	Out Hr Mins	Out Hr ACD	Out Hr ASR	Out Hr ABR
ALL	=ALL=	=ALL=	=ALL=		-	-	-	-	-	-
c01.2188	Lobster telecom	Green country	Beer telecom		-	-	-	-	-	-
			Gigantic telecom		-	-	-	-	-	-

To do so, please filter out the unnecessary objects by entering the required values in the **Filter** fields. You may also simply click on the plus signs to choose all objects of a given kind.

The report will be generated for all object combinations displayed in the filter mode.

The generic **=ALL=** object combines data from all objects of a kind, for example, all Customers, all Areas or all Vendors.

When done with filtering the required objects, click **GO**. The System will switch to the **Result** mode and display the very report.

VoIP stats

Chart Table **Report** Alerts CDR More... ?

Y E C C Cust ThisHr PrevHr 4h 6h 12h 1d 2d **3d** 1w 2w 4w Group: 1h 6h **1d** 1w All Filter GO Rows: 6

OBJECT 1 ID	OBJECT 1 Cust/Vendor	OBJECT 2 Area	OBJECT 3 Vendor	Time period beginning	Out 1d Atmpt	Out 1d Conn	Out 1d Mins	Out 1d ACD	Out 1d ASR	Out 1d ABR
c01.2188	Lobster telecom	Green country	Gigantic telecom	Apr 06, 00:00	207K	31.4K	153K	7.31	42.8	15.2
c01.2188	Lobster telecom	Green country	Gigantic telecom	Apr 05, 00:00	177K	37.4K	163K	6.55	45.1	21.1
c01.2188	Lobster telecom	Green country	Gigantic telecom	Apr 04, 00:00	90.6K	15.8K	72.9K	6.91	40.1	17.5
c01.2188	Lobster telecom	Green country	Beer telecom	Apr 06, 00:00	13.0K	1919	8332	6.51	42.5	14.7
c01.2188	Lobster telecom	Green country	Beer telecom	Apr 05, 00:00	13.7K	2640	11.4K	6.46	43.4	19.3
c01.2188	Lobster telecom	Green country	Beer telecom	Apr 04, 00:00	11.5K	2130	8304	5.85	40.2	18.5

Given the filter parameters above, the System will display data on the following object combinations:

- Lobster telecom -> Green country -> Gigantic telecom
- Lobster telecom -> Green country -> Beer telecom

For each object combination the data is taken for the previous 3 days and is grouped by 1 day.

If you right-click anywhere in the table body, you will see a context menu, and will be able to jump from the **Report** to other modules: **Chart**, **Table**, or **CDR**. Double-clicking any parameter cell will also open a chart.



## Thank you for your time

If you wish to request  
a fully functional trial  
or get more information,  
please contact:

Demo: [demo.5gfuture.com](http://demo.5gfuture.com)

Web: [www.5gfuture.com](http://www.5gfuture.com)

Skype: [support\\_5gfuture](https://www.skype.com/join/support_5gfuture)

Email: [sales-team@5gfuture.com](mailto:sales-team@5gfuture.com)