

JeraSoft Billing

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User Guide

Welcome to JeraSoft VCS User Guide

This is the Telecom Billing Software that we think is a **quantum leap** to develop the VoIP telephony services. This guide provides a general **overview** of the **VCS interface, key features** and useful information regarding its usage. We hope to make **the process of using** our application as painless as possible.

Please check the categories on the left navigation bar to get started or use search toolbar to find an answer to your questions.

- [Interface Basics](#)
- [Management](#)
- [Retail Details](#)
- [Statistics](#)
- [Tools](#)
- [Routing Details](#)
- [Configuration](#)
- [System](#)
- [Client's Control Panel](#)
- [System Shell Tools](#)
- [API Reference](#)

Interface Basics

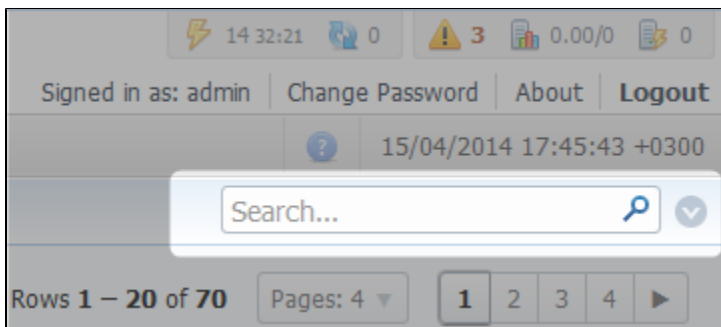
On this page

- [Quick Search](#)
- [SmartBar](#)
- [InfoBar](#)
- [Section Tabs](#)
- [Change Password](#)
- [System Logout](#)

Quick Search

This tool is used to perform a search of any information within administrator interface inside current section. For example, you can search for clients, rates, etc.:

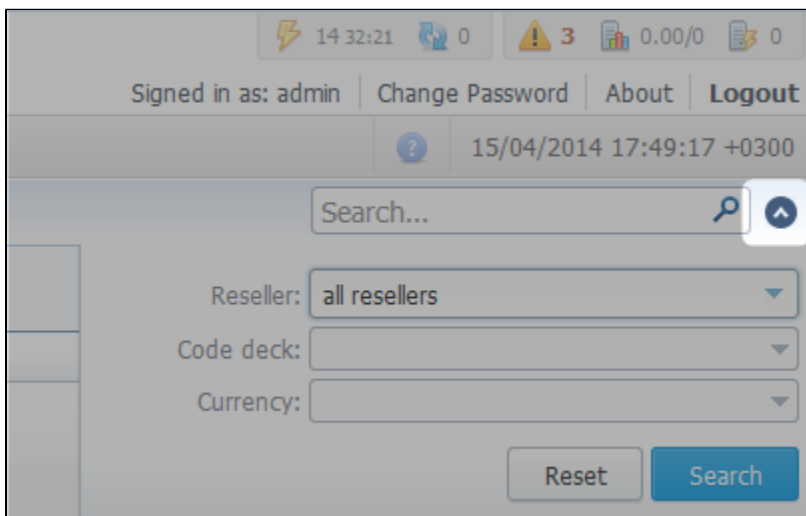
Screenshot: Quick Search panel



Note: *Quick Search* panel will not be present in every section of the system. It's available only in sections that contain listed information – *Clients* section, *Rate Tables*, etc.

Some sections allow the use of Advanced Search function, that is activated by clicking on arrow button (Screenshot):

Screenshot: Advanced Search panel

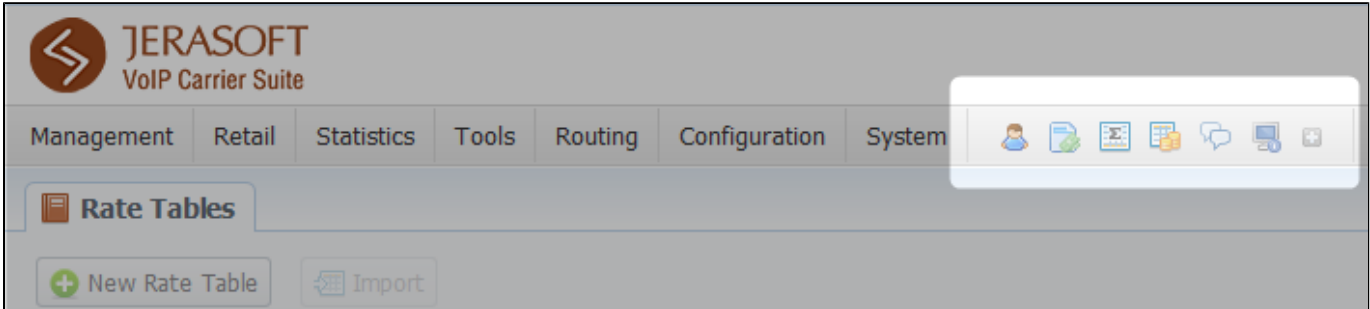


Note: If the arrow button has red color, this means that search is performed on selected parameters.

SmartBar

For quick launch of any system section indirectly, you can use the *SmartBar* shortcut panel. It is always situated in the upper part of the window, next to listing of system's sections:

Screenshot: *The SmartBar*

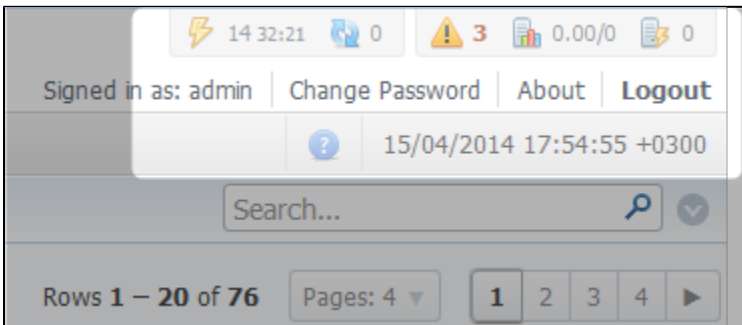


To add a shortcut of any section to SmartBar, press “+” button near section's name. To remove the shortcut, press “-” button at same location.

InfoBar

To have access to fast-changing system information system features the information panel – *InfoBar*.

Screenshot: *The InfoBar*



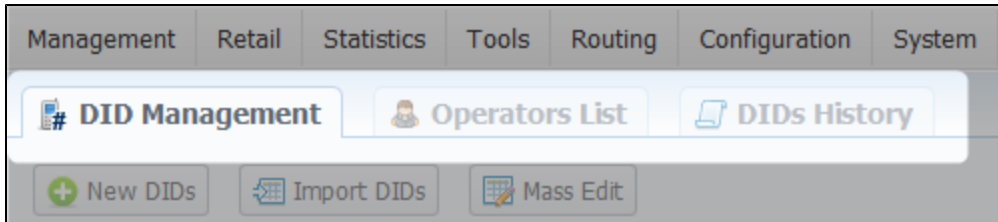
It is situated at top-right part of the screen and displays the following information:

Icon	Description
	CDR queue
	CDRs in queue for rerating
	Information about system alerts
	Load average on server / Number of CPU cores
	Number of running billing services

Section Tabs

Some functions of the sections are now available as Section Tabs. This feature is designed to make your work with this sections much more easier and comfortable.

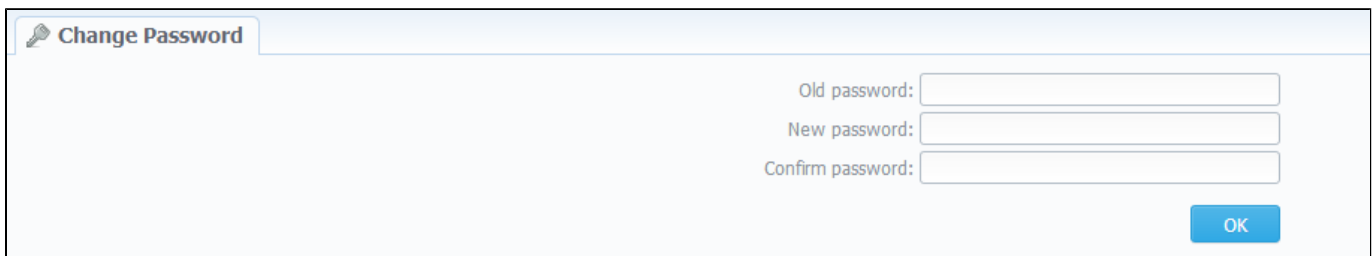
Screenshot: Section Tabs



Change Password

You can change current password by using *Change Password* menu (Screenshot):

Screenshot: *Change Password* menu

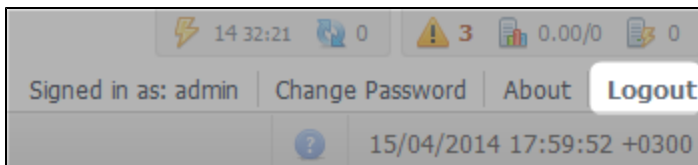


To change a password, enter current password in *Old Password* field, and enter a new password in *New Password* and *Confirm Password* fields. When you press "OK" button, current password will change.

System Logout

You can logout from system by using *Logout* menu:

Screenshot: *Logout* menu



Management

This chapter introduces how **the main components of the JeraSoft VCS** could be used to provide different management through the system.

Take a note, that while the **system walk-through**, you can find plenty of tooltips for not being stuck. It's easy to determine, whether there is a hint or not.

All tooltips in the system are shown as the text with a dotted underline, for example, [ORIGINATOR SETTINGS](#). All you need to do is to point to the title and an additional information becomes visible.

For more details please go to the related subsections:

- [Clients](#)
- [Accounts](#)
- [Rate Tables](#)
- [Invoices](#)
- [Transactions](#)
- [Balance Report](#)
- [Resellers](#)
- [Client Packages](#)
- [Presets](#)
- [Traffic Processing](#)

Clients

On this page

- [Clients List](#)
- [To add a new client](#)
- [Clients Templates](#)
- [Knowledge Base Articles](#)



Clients List















This section is used to manage your customers, providers, and all related information. The main window of this section is represented by list of all available clients:


Screenshot: Clients section main window


ID	Name	Balance			Pay Terms	Groups	Reseller
		Available	Live	Fixed			
4205	Customer 1	114 794.89 DKK	-14 885 205.11	-1 897.85	Every day		man E
11	Customer A	999 565.00 DKK	-435.00	3 445.30	Monthly		RESELLER A
22	Customer B	No Limit USD	-584.13	-191.44	Monthly		Reseller B
27	Customer D	No Limit USD	-486.03	-32.00	Every 15 days		RESELLER A
39	Customer E	9 743.90 USD	9 743.90	10 000.00	2nd day of month		man B
25	Customer F	No Limit DKK	-1 485.89	-1 836.68	6th day of month		RESELLER A
34	Customer G	255 371.95 DKK	-1 284.05	-99.34	Monthly		RESELLER A
31	Customer H	286 504.76 DKK	-13 495.24	-12 449.24	Monthly		Reseller B
20	Customer J	No Limit 1/2USD	15 549.11	19 607.84	Monthly		man C
15	Customer K	No Limit DKK	-4 563.66	-2 626.99	Monthly		SubReseller A


Column Name	Description	
ID	Client's identification number	
Name	Client's name	
Balance	Client's balance values	
	<ul style="list-style-type: none"> • Available 	"Live" client's balance including allowed credit
	<ul style="list-style-type: none"> • Live 	Client's balance calculated on basis of performed payments and processed calls
<ul style="list-style-type: none"> • Fixed 	Client's balance calculated on basis of the outstanding invoices and performed payments	
Pay Terms	Payment terms of each client	
Groups	Indicates, which group respective client belongs to	
Reseller	Name of Reseller's company that respective client belongs to	


Icon	Description
	Is used to identify the Orig/Term client
	Is used to identify the Orig client

	Is used to identify the Term client
	Is used to edit accounts (gateways, sip-accounts etc.)
	Is used for accessing client's current routing plan (icon will be colored if plan is assigned)
	Is used to add additional configurations to dynamic routing for current client
	Is used to display client's rates
	<ul style="list-style-type: none"> • ORIG Rate tables for incoming calls
	<ul style="list-style-type: none"> • TERM Rate tables for outgoing calls
	Is used to assign and manage your packages
	Is used to manage client's balance. It's a shortcut to <i>Transactions</i> section
	Is used to manage client's invoices. It's a shortcut to <i>Invoices</i> section
	Is used to manage client's balance report (Live or Fixed). It's a shortcut to <i>Balance Report</i> section
	Is used to manage client's summary report. It's a shortcut to <i>Summary Report</i> section
	Allows access to current client control panel (icon will be colored if access is available for customer)
	Is used to view sends history. It's a shortcut to <i>Mail Queue</i> section
	Is used to view change history. It's a shortcut to <i>Audit Log</i> section
	Is used to delete a client from the system

 **Tip:** If the prepaid mode is enabled, calls will be subject to balance check on a stage of call authorization (when RADIUS Authorization is used). If the postpaid mode is enabled, calls duration will be limited to "Max Call Duration" set in *Configuration – Settings*.

Use the **Quick Search** toolbar for fast investigation in Clients section. This tool makes a search filter to limit the search results for higher working efficiency. For example, to find clients belonging to a certain *Group* or having *Active status*. To open this form click on the down arrow .

 You can search through clients by Name and only by first letters ("start with" rule).
To find all clients with specified main e-mail, use * (asterisk) in the "Main E-mail" field.

 *Orig Group, Term Group, DID Group* filters will be visible and active only if you click on "Advanced" button.

Screenshot: Quick Search form

Search...

Group:

Status:

Reseller: all resellers

Type:

Main E-mail:

Account:

Account IP:

Payment Terms:

ORIG Rate Table:

TERM Rate Table:

Routing Plan:

Client ID:

✓ Please note, if you want to search by "Account Name" option, specify an identification account name (indicated in the field: *ID/Name/AN*), not a general name of the account.

If there is a need to **change last invoice date** (i.e. the day that the client has already been invoiced for) for more than one client, you can use **"Mass Edit"** functionality (Screenshot below). It is pretty simple in use:

- select clients;
- press **"Mass Edit"** button and specify the date in **"Last Invoiced"** field;
- press **"Update"** button.

Screenshot: Clients "Mass Edit" button

The screenshot shows a 'Mass Edit' dialog box with a 'Last Invoiced' field set to '2015-05-19' and an 'Update' button. The background is a table of clients with columns for ID, Name, Available, Live, Fixed, Pay Terms, Groups, and Reseller.

ID	Name	Available	Live	Fixed	Pay Terms	Groups	Reseller
4205	Customer 1	114 794.89 DKK	-14 885 205.11	-1 897.85	Every day		man E
11	Customer A	999 565.00 DKK	-435.00	3 445.30	Monthly		RESELLER A
22	Customer B	No Limit USD	-584.13	-191.44	Monthly		Reseller B
27	Customer D	No Limit USD	-486.03	-32.00	Every 15 days		RESELLER A
39	Customer E	9 743.90 USD	9 743.90	10 000.00	2nd day of month		man B

To add a new client

For adding a new customer in the system, click the **"New client"** button in the toolbar under client's list. A dialog window will show up:

Screenshot: Adding new client

Client Info

[Custom Fields](#)
[DIDs](#)
[Notes](#)

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Timezone:

Status:

Client's Template:

Groups:

Tax Profile:

Bill Calls by:

Hidden Numbers

CLIENT'S PANEL

Login:

New Password:

Access:

TERMINATOR SETTINGS

Rate Table:

Capacity: Channels

ORIGINATOR SETTINGS

Postpaid: USD

Payment Terms:

Rate Table:

Routing Plan:

Orig Groups:

Capacity: Channels

LOW BALANCE CONTROL

Notify Client: USD Notify Admin: USD

Threshold: USD Capacity: Channels

AUTOINVOICING

Template:

Last Invoiced:

RATE NOTIFICATION

Format:

Notify type:

AUTO PAYMENT

Extra Amount: USD

COMPANY INFO

Name:

Main E-mail:

NOC E-mail:

Notify about Factor Watcher blocks

Billing E-mail:

Rates E-mail:

Address:

ZIP Code:

Tax ID:


Reg ID:


Account Details:

Locale:

Then fill next fields to set client's parameters:

Section	Fields Description	
System Information	General information about client	
	<ul style="list-style-type: none"> Name 	A client's name
	<ul style="list-style-type: none"> Reseller 	Here you can select the name of one of your companies (or affiliates) that you can add in Reseller section (this name will be used in invoices)
	<ul style="list-style-type: none"> Currency 	Preferred currency (will be used in invoices)
	<ul style="list-style-type: none"> Timezone 	Choose the timezone from the drop-down list of all available. This timezone will be used in invoices by default. <div style="border: 1px solid #ffc107; padding: 5px; margin-top: 10px;"> If this parameter is not indicated, the timezone of the database will be automatically applied to the client's settings of the zone. It could lead to some problems while working with packages, rate tables, time profiles. </div>
	<ul style="list-style-type: none"> Status 	Select respective current status for the client: <ul style="list-style-type: none"> active stop deleted
	<ul style="list-style-type: none"> Client's Template 	Here you can apply the required template to a new customer
<ul style="list-style-type: none"> Groups 	You can specify a group to which current client will belong to (only available if current user has necessary role installed. Refers to <i>Client Groups</i> section)	

<ul style="list-style-type: none"> • Tax Profile 	<p>You can specify a tax profile which will be reflected in invoices (refers to <i>Taxes Profiles</i> section).</p> <ul style="list-style-type: none"> • SureTax is a tax levied on top of another tax. It allows to manage your compliance with tax law. This profile is used for further calculation in invoices. To get more details, check out the article "US Taxation". <div style="border: 1px solid #f0e68c; padding: 5px; margin-top: 10px;">  For proper usage of SureTax, the <i>Invoice Number</i> should contain only Latin and numeric characters. Max length is 40 symbols. <i>Dst</i> and <i>Src Numbers</i> should be in format <i>NPANXXNNNN</i> (10 digits). </div>																
<ul style="list-style-type: none"> • Bill Calls By 	<p>Select how the system should bill calls of current client – by setup time, connect time or disconnect time (most switch models use disconnect time)</p>																
<ul style="list-style-type: none"> • "Hidden Numbers" check box 	<p>Allows you to hide some part of numbers from calls made by this client in invoices, CDR's reports and during export</p>																
<p>"Client Panel" check box</p>	<p>Activates/deactivates the log in procedure to the client's control panel for a current client. Customer can get access to this control panel by using the following link: http://vcs_address/clients/</p> <p>Sections that are available for clients within that control panel can be turned on or off by respective check boxes. A full list of available sections is the following: Client Info, Invoices, Rates List, Summary Report, CDRs List, Balance Report, Payment Gateways, Change Password.</p> <p>Important: if no login for "Client Panel Access" is specified or no fields are selected, then access to control panel will be forbidden. This access is configured with a list of available fields and following parameters</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> • Login </td> <td>Client's login</td> </tr> <tr> <td> <ul style="list-style-type: none"> • New password </td> <td>Client's password</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Access </td> <td>Here you can select the sections that are available for current client</td> </tr> </table>	<ul style="list-style-type: none"> • Login 	Client's login	<ul style="list-style-type: none"> • New password 	Client's password	<ul style="list-style-type: none"> • Access 	Here you can select the sections that are available for current client										
<ul style="list-style-type: none"> • Login 	Client's login																
<ul style="list-style-type: none"> • New password 	Client's password																
<ul style="list-style-type: none"> • Access 	Here you can select the sections that are available for current client																
<p>Originator Settings</p>	<p>Settings for your customers, who send calls to your switch. Current clients' billing settings are specified here</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> • "Postpaid" check box </td> <td>Here you can set needed paid mode for a client. If you enable the postpaid mode, the client doesn't have unlimited credit. It is disabled by default.</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Credit </td> <td>Additional field next to the "Postpaid" check box. Here you can set the credit limit allowed for a client. You could fill this field with any of positive and negative numbers, but no more than 9 digits.</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Payment Terms </td> <td>Select the payment terms template</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Rate table </td> <td>Select the origination rate table</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Routing Plan </td> <td>Select appropriate routing plan that will be used to route all calls of this customer (but it may be overridden for any of customer's accounts in <i>Accounts</i> tab)</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Orig groups </td> <td>Choose the respective orig group for managing an extra rate and extra routing</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Threshold </td> <td>Specify the balance threshold below which a special capacity will be applied</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Capacity </td> <td>Summary origination capacity for this client</td> </tr> </table>	<ul style="list-style-type: none"> • "Postpaid" check box 	Here you can set needed paid mode for a client. If you enable the postpaid mode, the client doesn't have unlimited credit. It is disabled by default.	<ul style="list-style-type: none"> • Credit 	Additional field next to the "Postpaid" check box. Here you can set the credit limit allowed for a client. You could fill this field with any of positive and negative numbers, but no more than 9 digits.	<ul style="list-style-type: none"> • Payment Terms 	Select the payment terms template	<ul style="list-style-type: none"> • Rate table 	Select the origination rate table	<ul style="list-style-type: none"> • Routing Plan 	Select appropriate routing plan that will be used to route all calls of this customer (but it may be overridden for any of customer's accounts in <i>Accounts</i> tab)	<ul style="list-style-type: none"> • Orig groups 	Choose the respective orig group for managing an extra rate and extra routing	<ul style="list-style-type: none"> • Threshold 	Specify the balance threshold below which a special capacity will be applied	<ul style="list-style-type: none"> • Capacity 	Summary origination capacity for this client
<ul style="list-style-type: none"> • "Postpaid" check box 	Here you can set needed paid mode for a client. If you enable the postpaid mode, the client doesn't have unlimited credit. It is disabled by default.																
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<ul style="list-style-type: none"> • Routing Plan 	Select appropriate routing plan that will be used to route all calls of this customer (but it may be overridden for any of customer's accounts in <i>Accounts</i> tab)																
<ul style="list-style-type: none"> • Orig groups 	Choose the respective orig group for managing an extra rate and extra routing																
<ul style="list-style-type: none"> • Threshold 	Specify the balance threshold below which a special capacity will be applied																
<ul style="list-style-type: none"> • Capacity 	Summary origination capacity for this client																
<p>Terminator Settings</p>	<p>Settings for your vendors, whom you send calls from your switch. Current clients' billing settings are specified here</p>																

	<ul style="list-style-type: none"> • Rate table 	Select the termination rate table
	<ul style="list-style-type: none"> • Capacity 	Summary termination capacity for this client
Low Balance Notifications	Here you can setup whether system should make low balance notifications or not	
	<ul style="list-style-type: none"> • Notify Client 	When clients' balance+credit is below entered value, system will send a notification to clients' <i>Billing e-mail</i>
	<ul style="list-style-type: none"> • Notify Admin 	When clients' balance+credit is below entered value, system will send a notification to administrator via <i>Events Log</i>
	<ul style="list-style-type: none"> • Threshold 	Available balance threshold below which the special capacity setting will be applied
	<ul style="list-style-type: none"> • Capacity 	Origination capacity limit that will be applied when available balance is below threshold
"Autoinvoicing" check box	Activates/deactivates the automatic invoice generation feature for a current client. It can be configured with parameters	
	<ul style="list-style-type: none"> • Template 	Select an invoice template for this customer
	<ul style="list-style-type: none"> • Last Invoiced 	Specify last day, that the client has already been invoiced for
"Rate Notification" check box	Here you can enable or disable automatic rates notification for current client	
	<ul style="list-style-type: none"> • Format 	Select desirable format of rate notification (XLS or CSV)
	<ul style="list-style-type: none"> • Notify Type 	Specify a type of notification: <i>All rates</i> - full price list <i>Only changed rates</i> - only changed rates will be sent <i>All rates - unique mode</i> - if there two or more new rates with different effective dates for one code, several files will be sent and each will contain all unchanged rates and only one rate change for one code
"Auto Payment" check box	Activates/deactivates the automatic charge to customers' credit card registered at <i>Authorize.net</i> electronic payment service. Please note that you can register a credit card via <i>Refill balance</i> section in <i>the Client's panel</i> . To open <i>Client's panel</i> , please click the icon 	
	<ul style="list-style-type: none"> • Extra Amount 	Define a payment amount
Company Info	Some additional information about client can be entered here	
	<ul style="list-style-type: none"> • Name 	Company name
	<ul style="list-style-type: none"> • Main E-mail 	Company e-mail for general inquiries
	<ul style="list-style-type: none"> • NOC E-mail 	Company email for technical related questions
	<ul style="list-style-type: none"> • "Notify about Factor Watcher blocks" check box 	This tool watches over different parameters and generates alerts if some conditions are met. This function is optional, i.e. you can enable or disable them in Clients form

• Billing E-mail	Automatically generated invoices and notifications will be sent to this e-mail address
• Rates E-mail	Company e-mail for rates related questions
• Address	Physical company address
• ZIP Code	Postal code
• Tax ID	Customer's tax ID
• Reg ID	Customer's registration ID
• Account Details	Reference information about client's bank account or payment details
• Locale	Preferred locale, that will be sent as a reply to RADIUS Authorization. It is used for IVR platforms to define the language



Autoinvoicing tool sends rates in separate files for each time profile used in certain Rate Table



Warning: "Full Delete" button can be used to permanently remove a client from the system, disregarding any statistics or rate tables data connections. Please, use this feature with care – deleted client can not be restored by any means.

Clients Templates

This section allows you to create a client template where you can specify the main information about a client, originator settings, etc. Further, this template can be used to set the billing and tariffication parameters for customers, managers or resellers in several clicks. **For more details** please check the related section: [Clients Templates](#).

Knowledge Base Articles

- [US Taxation](#)
- [How to set Prepaid or Postpaid mode?](#)
- [How to set up a functional capacity?](#)
- [Priority of Capacity field use in Clients section](#)

Clients Templates

This section allows you to create a client template where you can specify the main information about a client, originator settings, etc. Further, this template can be used to set the billing and tariffication parameters for Customers, Managers or Resellers in several clicks.

Screenshot: Client's Templates List

ID	Name	Credit	ORIG Rate Table	Routing Plan	Groups	Reseller
10	Company Name - default	0.00 USD	-	-		Company Name

To create a new template you need to click the "New Client Template" button. A new dialog window will show up, here you need to fill out all required fields, for instance, Name, Reseller, Currency, Rate Table, etc.

Screenshot: New Client Template settings

Section	Fields Description
System Information	General information
	<ul style="list-style-type: none"> Name - A client's name
	<ul style="list-style-type: none"> Reseller - Here you can select the name of one of your companies (or affiliates) that you can add in Resellers section (this name will be used in invoices)
	<ul style="list-style-type: none"> Currency - Preferred currency (will be used in invoices)
Originator Settings	<ul style="list-style-type: none"> Groups - Select a group to which current client will belong to
	Billing settings and tariffication parameters for customers, who send the calls to your switch
	<ul style="list-style-type: none"> Credit - Credit limit allowed for client
	<ul style="list-style-type: none"> Rate table - Select the origination rate table
	<ul style="list-style-type: none"> Routing Plan - Select an appropriate routing plan that will be used to route all calls for this customer
<ul style="list-style-type: none"> Orig Groups - Set routing groups where origination accounts of current client will belong to 	
<ul style="list-style-type: none"> Capacity - Summary origination capacity for the client 	

Low Balance Notifications	Here you can setup whether system should make low balance notifications or not	
	• Notify Client	When clients' balance+credit is below entered value, the system will send a notification to clients' <i>Billing e-mail</i>
	• Notify Admin	When clients' balance+credit is below entered value, the system will send a notification to administrator via <i>Events Log</i>
	• Threshold	Available balance threshold below which the special capacity setting will be applied
	• Capacity	Origination capacity limit that will be applied when available balance is below threshold



Tip: Client's Templates allows you to fill out customer's settings with **standard default values**. If you do not specify the values (*i.e Groups, Credit, Rate Table, Routing Plan, Orig Groups, Capacity, Notify Client, Notify Admin*) in the *Client form*, the **Client's Templates** allows to take the following values from templates (that is during authorization).

Please note, the system can fill only empty fields with standard default values overridden from assigned template. For example, if the client has 0 (specified by default) in the *Credit field* near the Postpaid check box, you need to clear it manually, otherwise, this value will not be taken from the template.

But these values **will not be shown** in the **Client form**.

For example, when there are no values in the Client form, the system will take them from assigned template. When there are no values in the template assigned to the Client, they will be taken from *Manager/Reseller's settings*.

Interface properties

The process of applying a template to the *Client* is pretty simple. All you need to do:

- go to *Clients List*, click on "New Client" button or select the needed *Client* ;
- fill out the *Client's Template* field by selecting a needed template from the drop-down list;

Please note that the icon of "Client's Templates" (existed in the previous version in Clients section) is removed. Now you need to choose the template from the drop down list that appears with templates available for use.

Screenshot: Applying template in Client's settings

New Client

SYSTEM INFORMATION

Name:

Reseller: **AUTO Reseller - 111**

Currency: **USD**

Timezone: **default (UTC)**

Status: **Active**

Client's Template: **<template>**

Groups:

Tax Profile:

Bill Calls by: **disconnect time**

Hidden Numbers

CLIENT PANEL

Login:

Password:

Access:

TERMINATOR SETTINGS

Rate Table:

Capacity: channels

ORIGINATOR SETTINGS

Postpaid: 0 USD

Payment Terms:

Rate Table:

Routing Plan:

Orig Groups:

Capacity: channels

LOW BALANCE NOTIFICATION

Notify Client: USD

Notify Admin: USD

AUTOINVOICING

Template:

Last Invoiced:

RATE NOTIFICATION

Format: **Excel CSV**

Notify type: **All rates**

AUTO PAYMENT

Extra Amount: 0 USD

COMPANY INFO

Name:

Main E-mail:

NOC E-mail:

Notify about Factor Watcher blocks

Billing E-mail:

Rates E-mail:

Address:

Tax ID:

Reg ID:

Account Details:

Locale:

OK **Cancel** **Apply**

In *Reseller* section there is an option for *Manager/Reseller* to set a *Client's Template*, i.e. this template will be used under this Reseller or Manager by default. All you need to do:

- go to *Reseller* section and select the needed *Manager/Reseller* (configuration window will pop-up)
- fill out the *Client's Template* field by selecting a template from the drop-down list

Screenshot: Applying template in Reseller's settings

Edit Reseller Custom Fields Rates Notifications Telecom

SYSTEM INFORMATION

Name:

Parent: **...root...**

Currency: **USD**

Status: **Active**

Client Template:

Tax Profile:

VoIP Gateways:

TERMINATOR SETTINGS

TERM Rates:

TERM Capacity:

FRAUD PROTECTION

Notification frequency: 10

Skip digits: 0

ORIGINATOR SETTINGS

Postpaid: 0 USD

ORIG Rates:

ORIG Capacity:

INVOICING INFORMATION

Date: **Real date**

Template: **default | PDF**

No. Tpl:

Last No:

EMAIL RATES IMPORT SETTINGS

Host:

Port:

CONTACT INFORMATION

E-mail:

Postal Address:

Tax ID:

Reg ID:

Bank Account:

COMPANY LOGO

Choose File No file chosen

Full Delete **OK** **Cancel** **Apply**

MAIL TEMPLATES:

- MAIL TEMPLATE: INVOICE
- MAIL TEMPLATE: PAYMENT REMINDER NOTIFICATION
- MAIL TEMPLATE: LOW BALANCE NOTIFICATION
- MAIL TEMPLATE: RATES NOTIFICATOR
- MAIL TEMPLATE: FACTORS WATCHER

Screenshot: Applying template in Manager's settings

Edit Reseller AUTO Manager - 111

SYSTEM INFORMATION

Name:

Parent:

Status:

Client Template:

CONTACT INFORMATION

E-mail:

Postal Address:

Also, you can assign the Routing Plan in the **Client's Templates**. The Routing Plan field is removed from Reseller's Settings.

Screenshot: Client's Template settings

Clients

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Groups:

ORIGINATOR SETTINGS

Credit: USD

Rate Table:

Routing Plan:

Orig Groups:

Capacity: Channels

LOW BALANCE CONTROL

Notify Client: USD

Notify Admin: USD

Threshold: USD

Capacity: Channels

Tip: Please be advised that values overridden from templates, i.e. *Routing Plan*, *Rate Table*, *Credit*, are displayed only on the Client list. They will not be shown on the Client's account.

Functional properties

1. If there are no indicated values (such as Groups, Credit, Rate Table, Routing Plan, Orig Groups, Capacity, Notify Client, Notify Admin) in the Client's Settings, it will automatically override these values from the closest template.
2. The closest template is considered a first template found by the following chain: Client his Manager his Reseller
3. If there are no found values mentioned above in the closest template, a further search stops and values are not defined.

When you remove the template, there is a validation of use this template by Client, Manager or Reseller. The pop-up window with notification will appear.

Screenshot: Removing template

JERASOF VoIP Carrier Suite

Client Template is in use in clients or resellers - please remove it from configuration first

Change Password About Logout

Management Retail Statistics Tools Routing Configuration System

Reports

1. If the **credit** overridden from the template is already applied for the Client, there is no way to add the package in *Clients/Account* section. This option will appear in the next version.
2. The drop-down list of available **templates for the Client/Reseller** is similar for *Routing Plans, Rate Tables*.
3. If you want to **change the Reseller**, you will proceed without any application checks of this template by the *Client/Manager/Reseller*.
4. The **currency** indicated in the *Client Template* and the currency of the customer to which it applies should be the same to work properly.
5. All **Managers**, regardless of their nesting level, have a possibility to **see the full list of templates that belong only to their Reseller**.

Screenshot: Client's Template section

Clients

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Groups:

ORIGINATOR SETTINGS

Credit: USD

Rate Table:

Routing Plan:

Orig Groups:

Capacity: Channels

LOW BALANCE CONTROL

Notify Client: USD

Notify Admin: USD

Threshold: USD

Capacity: Channels

Custom Fields

Here you can find the list of *Custom Fields* that have already been added and assigned to the respective *Client* by the *Reseller*. This tab allows you to manage these fields. Further, specified information *will be used in invoice templates* as custom functions.

Screenshot: Custom Fields Clients Section

You can add these fields in *Management – Resellers* section by clicking "Add Custom Field" button, then you need to specify field key and title.

Screenshot: Custom Fields Reseller section

Field	Description
Field Key	Specify <i>unique</i> custom key for using the created field in invoice templates. Please note that only characters, number or underscore are allowed for this field. No blank spaces.
Title	Create the title of the clients Custom Fields form. Please note that it is obligatory to specify the title.

DIDs Management

This section allows you to assign already existed DID numbers to a certain clients' account (Screenshot).

Screenshot: DIDs section window

DID	Status	Assigned to	Package name		
015108728	active	account_5	mts		✖
015108731	active	account_5	mts		✖

Column	Description
DID	List of DID numbers
Status	Status of current DID
Assigned to	Shows clients' accounts whom the current DID number is assigned to
Package name	List of packages

Icon	Description
	Click this icon to start the DID
	Click this icon to pause the DID
	Click this icon to delete the DID

"Add DID" Button

To assign a DID number just click on "Add DID" button, then in the pop-up window specify an account, select a package, and finally, select a DID number, for applying settings press "Add DID" button (Screenshot below).

Screenshot: "Add DID" button

DID	Status	Assigned to	Package name		
	active	account_5	mts		✖
	active	account_5	mts		✖





Please note that "Add DID" button is visible only if a client has at least one account and activated package. Plus you can assign only defined number of DIDs, the number which you previously specified during package creation.

Notes

This tab represents a notebook for saving different additional information concerning current client. For example, this may be used by managers to share relevant info regarding particular customer between themselves.

To add a new note open the "Note" tab of respective client, click the "Add Note" button on the toolbar, enter the message or select a file and click "OK".

Also, you can edit or remove notes associated with respective client. **To change an existing note**, hover over the comment you'd like to edit and click *the edit icon* . Then, a new pop-up window with settings appears.

To quickly **remove a note**, hover over the comment you'd like to cancel and click *the delete icon* .

Screenshot: Notes tab



The screenshot shows a software interface with a top navigation bar containing tabs for 'Client Info', 'Custom Fields', 'DIDs', and 'Notes'. The 'Notes' tab is active and highlighted with a red border. Below the navigation bar is a toolbar with an 'Add Note' button. The main area contains a table with one row of data. The table has columns for 'Updated by', 'Comment', and two empty columns. The 'Updated by' column contains 'admin' and a timestamp '06/27/2016 05:50:25 -0400'. The 'Comment' column contains 'Notes on client accessibility' and 'File: detailed_client_info.pdf'. The two empty columns contain edit and delete icons respectively. The text 'Rows 1 - 1 of 1' is displayed in the top right corner of the table area.

Updated by	Comment		
admin 06/27/2016 05:50:25 -0400	Notes on client accessibility File: detailed_client_info.pdf		

Accounts

On this page

- [Accounts List](#)
- [Quick Search](#)
- [Adding New Account](#)
- [Knowledge Base Articles](#)

Accounts List

This section is designed to create and manage clients' accounts. Main window is represented by the list of all available accounts in the system:

Screenshot: Accounts section

ID	Client	Account	Name / ANI / IP	Tech Prefix	Orig Details	Term Details
737	Test Customer	Account 1	IP: 11.12.13.4/32	+1	RT: Europe GR: test acc	OC: - RT: Premium TC: -
738	Test Customer	Account 2	IP: 11.12.12.3/32	49	RT: America GR: test acc	OC: 5 RT: Wholesale TC: 5
739	Test Customer	Account 3	Name: abc		RT: Africa	OC: - RT: Term Rate TC: -

Column Name	Description
ID	Client's identification number
Client	Client's name
Account	Account's name
Name/ ANI / IP	The way of clients identification
Tech Prefix	Technical prefix for users identification
Orig Details	Settings of the Originator
Term Details	Settings of the Terminator

Icon	Description
	To filter accounts by <i>Client</i>
	To open the list of <i>Clients</i>
	To view the history in the <i>Audit log</i> section



When you **delete an account** from the system, all **associated statistics will be removed, amounts will be refunded and client balance will increase.**

We recommend deactivating useless accounts instead of completely deleting from the system. You can deactivate an account simply disabling *Originator/Terminator settings* checkboxes.

Quick Search

Use the **Quick Search toolbar** and click the down arrow on the top of the page for fast investigation (for instance, accounts belonging to a certain *Client*).

When you click the red down arrow , a drop-down menu appears.

You can start a quick search by typing your keywords into the bar at the top of page and clicking the "Search" button. To hide the drop-down search menu, click the upward pointing arrow .



Screenshot: Quick Search form

Adding New Account

To add a new account, click the "New Account" button. A dialog-window will show up where you should fill all needed fields:

Screenshot: Adding new account

Section	Fields Description
General	General information about account
	<ul style="list-style-type: none"> Client Specify a client whom this account will belong to
	<ul style="list-style-type: none"> Name Define a name of an account for JeraSoft VCS system

	<ul style="list-style-type: none"> Ident by <p>The VCS system allows client identification in 3 different ways, you need to select one of mentioned below:</p> <ul style="list-style-type: none"> IP – gateway IP-address. You can specify multiple addresses, by dividing them with “;”. Also you can specify the subnet with mask here in CIDR-format, e.g. "10.0.0.0/24", "200.200.200.208/28" Name – gateway name or user login, that is used for identification ANI (Automatic number identification) – called or caller phone number
	<ul style="list-style-type: none"> Techn Prefix <p>Define technical prefix, that is used to identify users, when multiple clients use same gateway</p>
	<ul style="list-style-type: none"> Password <p>Set a user password that is used with login/password identification. Also can be used through default authentication mechanism. For more info please consult your switch system manuals</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> Note that the password can be automatically generated, you need just to click on the icon  abc in the password field.</p> </div>
	<ul style="list-style-type: none"> VoIP Gateway <p>Specify a gateway for the account which will be in use only when billing this host calls. Please note that starting from VCS 3.8.6 it is possible to assign more than one VoIP Gateway to one account.</p>
	<ul style="list-style-type: none"> Notes <p>Additional information about current account</p>
Originator Settings	Settings for your customers, who send calls to your switch
	<ul style="list-style-type: none"> Rate Table <p>Select rate table for current account (it will have higher priority than rate table set for whole client) for origination side</p>
	<ul style="list-style-type: none"> Routing Plan <p>You can specify a custom routing plan for origination from this account</p>
	<ul style="list-style-type: none"> Groups <p>Set routing groups where current origination account will belong to. Then, in Routing Plans section you will allow routing only for these origination groups. Please consult Routing Details section for more information</p>
<ul style="list-style-type: none"> Capacity <p>Set limitation for the number of simultaneous calls within this account</p>	
Termination Settings	Settings for your vendors, to whom you send calls from your switch
	<ul style="list-style-type: none"> Rate Table <p>Select rate table for current account (it will have higher priority than rate table set for whole client) for termination side</p>
	<ul style="list-style-type: none"> Groups <p>Set routing groups where current termination account will belong to. Then, in Routing Plans section you will be able to route directly to one of these termination groups. Please consult Routing Details section for more information</p>
	<ul style="list-style-type: none"> Capacity <p>Set capacity for respective traffic direction</p>
<ul style="list-style-type: none"> Protocol <p>Select respective protocol for current termination gateway</p>	

• Proxy	Specify proxy for current termination gateway
• Port	Specify port for current termination gateway

You can add unlimited number of accounts for each client.



Please note that two identical accounts can be assigned only to different VoIP Gateways.

Knowledge Base Articles

- [How to specify CLI and non-CLI traffic?](#)
- [How to set up a functional capacity?](#)
- [Why the Account cannot be added, same IP / Name exists within other client message during adding an IP to an account appeared?](#)

Rate Tables

On this page

- [Rate Tables List](#)
 - [To add a new rate table](#)
 - [To configure rates](#)
 - [Import](#)
- [Knowledge Base Articles](#)

Rate Tables List

This section allows you to manage your rate tables. The main window of this section is presented on screenshot below:

Screenshot: Rate Tables section main window

ID	Name	Currency	Code deck	Reseller	Notes
77	Rate_Africa	USD	DEFAULT	Company Name	
89	Rate_Antarctica	USD	DEFAULT	Company Name	
15	Rate_Australia	USD	DEFAULT	Company Name	
88	Rate_Europe	USD	DEFAULT	Company Name	
76	Rate_North America	USD	DEFAULT	Company Name	
78	Rate_South America	USD	DEFAULT	Company Name	

To add a new rate table

In order to add a new rate table, click the **"New Rate Table"** button, then define respective values:

Field	Description
Name	The title of a respective rate table
Reseller	The Reseller to whom this rate table belongs to
Parent Rate Table	The rable table to inherit rates from. Codes with the same length in the current rate table will have the priority. However, longer codes from the parent rate table will override the codes in this rate table <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"><p>i</p><ol style="list-style-type: none">1. Please note, that the currencies of a parent and current rate tables should be the same.2. The working method with Parent Rate Table could be applied only for origination.</div>
Code Deck	The deck that consists of a destination code and a destination name
Currency	Preferred currency (will be used in invoices)
"Rates with taxes" check box	Tax settings. It's disabled by default. If you enable it, all rates will include above tax in their values. When it is disabled, the tax value will be added as an additional invoice parameter.
Description	Additional information

Screenshot: New rate table window

Rate Tables

GENERAL RATE TABLE SETTINGS

Name:

Reseller: AutoTest_Company

Parent Rate Table:

Code Deck:

Currency:

Rates with taxes

Description:

This section will also store all rate tables that you plan to analyze via **Rates Analysis** section. You will be able to change these settings later by using **"Parameters"** tab. After everything is entered, click "OK" button. New rate table will appear on the list.

To configure rates

You can configure the rates by clicking on the respective name of the rate in the full list. The rate management has a tab panel with following values:

Tab	Description
Rates	Rates configuration
Extra	Extra rates configuration
Simulate	Call simulation tool
Rate Formulas	Time parameter for calls billing process
Import	Rates importing from csv or xls files
Export	Rates exporting to csv or xls files
Parameters	Here you can change some parameters that you've specified during rate table creation

Import

In general, you can **import all existing rate tables** from this section of the VCS. To **import multiple rates**: first, select rates and then click the **"Import"** button on the toolbar at the top left of the rate tables to launch the import wizard.

Screenshot: Rate Tables section main window

Rate Tables

Rows 1 – 6 of 6

ID	Name	Currency	Code deck	Reseller	Notes
<input checked="" type="checkbox"/>	77 Rate_Africa	USD	DEFAULT	Company Name	
<input checked="" type="checkbox"/>	89 Rate_Antarctica	USD	DEFAULT	Company Name	
<input checked="" type="checkbox"/>	15 Rate_Australia	USD	DEFAULT	Company Name	
<input type="checkbox"/>	88 Rate_Europe	USD	DEFAULT	Company Name	
<input type="checkbox"/>	76 Rate_North America	USD	DEFAULT	Company Name	
<input type="checkbox"/>	78 Rate_South America	USD	DEFAULT	Company Name	

For information about import process, see ["Rates Import tab"](#).

Knowledge Base Articles

- [How to bill by Access Numbers \(A-number billing\)?](#)

Rates Tab

On this page

- [Tab Description](#)
- [Adding New Rate](#)
- [Mass Rate Edit](#)
- [Quick Rate Search](#)
- [Not confirmed rates](#)


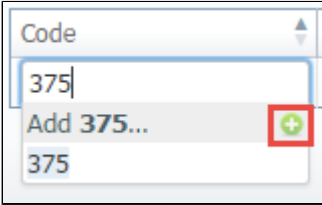

Tab Description

This tab allows the user to add new rates with different tariffication parameters for each code, also export rates and mass update them. You know you are on the **"Rates"** tab when the tab is highlighted.

Screenshot: Rates tab settings

Adding New Rate

All you need to do is to click the **"Add Rate"** button to create a new rate line and then fill next fields:

Field	Description
Code	<p>Destination code. Please note, you can add a code at already chosen code deck while creating a new rate. To do it, click the plus icon  next to the respective code (see screenshot below). The plus icon will be visible if there is code deck specified previously.</p> <p><i>Screenshot: Rates settings/ column Code</i></p> 
Code Name	Name of code group (available if code deck is attached)
Rate	Price per 1 minute of call
Changes	This field shows how current rate differs from previously effective one
Effective Date	Rate start date (newest available rate for particular destination)
Min	Minimal time of call that will be tarifficated. For example, if total call time was 20 seconds and <i>Min Time</i> is 30, then client will pay for 30 seconds of call
Int	Tariffication interval. This parameter is used, when <i>Min Time</i> time expires
Extra	Additional parameters are stored under  down arrow.

Fields	
• Tag	Specify a tag for respective rates. If it's not applicable, select the "Regular" tag as default.
• End Date	After specified date the rate would not be used
• Profile	Which time profile will be used for current rate, for example, <i>business time</i> , <i>non-business time</i> , <i>weekends</i> , etc.
• Setup Fee	Setup fee (charged when call duration is longer than 0 seconds)
• Grace Time	Time interval that will not be tarifficated (free time). For instance, if you specified 5 sec as a <i>Grace time</i> , that means, all calls with duration up to 5 seconds (including calls with session time of 5 seconds) will be free of charge
• Notes	Additional information about current rate

After you finish filling all fields, click the "" button.

Also, you can quick export the rates by clicking the "Export Filtered" button on the rates toolbar or open the tab "Export".

✓ How to manage future changes of rates manually

To do so, enable the simple mode of Full A-Z import and import rates. Then, click the "Future changes" button on the toolbar of Rates tab. It will show a list of conflicting rates. On the screenshot below you can find two pairs of conflicting rates because of different effective dates.

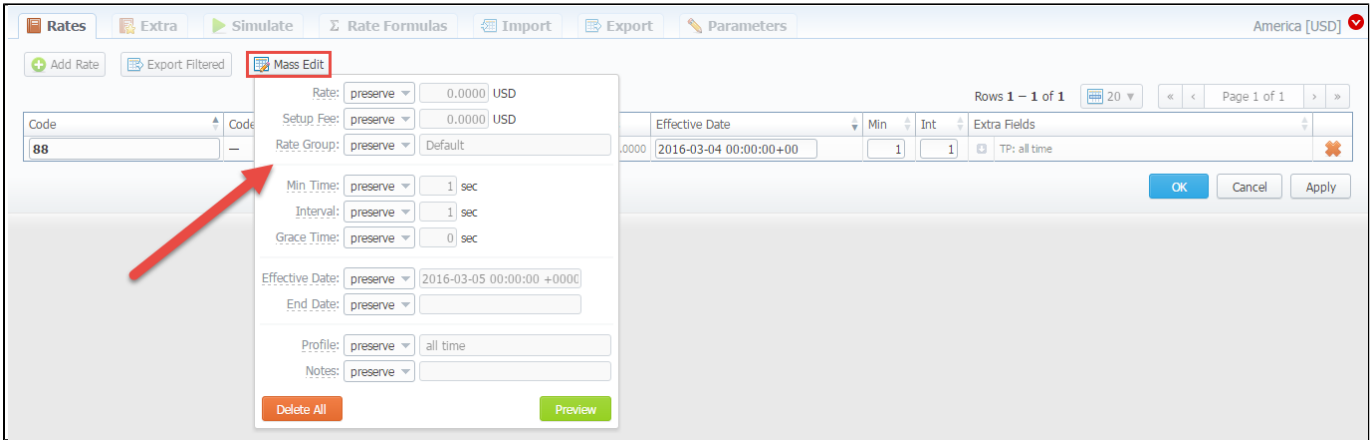
Screenshot: Rates tab

Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
33	1	0.1900	0.0000	2016-07-16 20:00:00-04	1	1	TP: all time
33		0.1900	-0.0100	2016-07-13 00:00:00-04	1	1	TP: all time
88881111	2	0.3900	0.0000	2016-07-16 20:00:00-04	1	1	TP: all time
88881111		0.3900	0.0000	2016-07-13 00:00:00-04	1	1	TP: all time

Mass Rate Edit


Moreover, it's possible to make a mass update of the rates by clicking the "Mass Edit" button on the rates toolbar and the drop-down settings menu appears. Then you need to fill the fields according to your needs.


Screenshot: Rates tab search settings



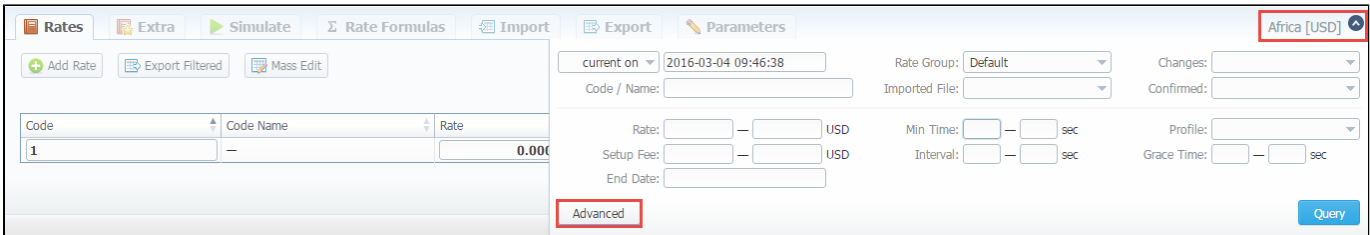
Mass edit options	Description
Optional parameters	<ul style="list-style-type: none"> • preserve - the default configuration that saves the rate not edited. Leave this parameter unchanged if required; • set to - it allows to edit rates, for example, specify the same effective date for all rates at once, regardless of previous configurations; • inc for - here you can indicate how the original value should be increased; • dec for - here you can indicate how the original value should be decreased.
Rate	Price per one minute of call
Setup Fee	An initial fee that is charged when call duration is longer than 0 seconds
Rate Group	Group for the traffic matching this rule. It's only for jurisdictional billing.
Min Time	Minimal time of the call
Interval	Interval for the tariffication in seconds. It's used when the Min time parameter expires
Grace Time	Not paid time interval in seconds
Effective Date	Start date before which the rate will not be used
End Date	Final date after which the rate will expire
Profile	Time Profile that will be applied to a current rate
Notes	Additional information about rate

Quick Rate Search

Use the **Quick Search** toolbar and click the down arrow  on the top of the page for fast investigation. When you click the red down arrow a new drop-down search menu appears (see screenshot below). To open additional settings, click the "**Advanced**" button.

To hide the drop-down search menu, click the upward pointing arrow  next to the title of the rate.

Screenshot: Rates tab search settings



Field	Description
Rate Time Frame	Search by the period of a rate during which the rate is active, expired, etc., as compared with data specified in the next field. The following time frames are available to choose from drop-down list: <ul style="list-style-type: none"> • current on - search includes rates that are active for specified data • old for - search rates that are expired for specified data • future for - the future rates compared with specified data • current/new - includes current and future rates • all - includes all rates
Code /Name	Search by the title or code
Rate Group	Investigate by a respective name of the rate group that is used for jurisdictional billing
Imported File	Research by the title of an imported file , choose a file from the drop-down list of all available. If the list is empty, there is no imported files.
Changes	Search by the cost changes of the rate . The following types are available to choose from drop-down list: <ul style="list-style-type: none"> • Decreased • Increased • Not changed • New
Confirmed	Investigate by the state of the rate: confirmed or not confirmed
Rate	Research by the rate , the price interval could be specified
Setup Fee	Quick search by the setup fee of the rate , the interval could be specified
End Date	Search by the expiration date of the rate
Min Time	Research by the minimal time of call that will be tarifficate
Interval	Investigate by the tariffication interval
Profile	Fast search by the time profile of the rate
Grace time	Investigation by the interval of the free time



When you filter rates by the state (for example, *current/new, future for, current on*), **non-confirmed rates** will not show up in the search results. To include non-confirmed rates, choose the state **"All"** from the drop-down list.

Not confirmed rates

If you see the rate rows colored in yellow, this means that these rates in **pending state** and you need to confirm them all (click the **"Confirm All"** button) or each one separately (tap respective check boxes with codes and then click the **"Confirm"** button on the toolbar) (see screenshot below).

Not confirmed rated appears while import process. When you import a file with rates in the system and tap the **"Enable the confirm mode"** check box.

Screenshot: Rates tab search settings

Add Rate Export Filtered Mass Edit

Rows 1 – 10 of 10 10 Page 1 of 1

<input type="checkbox"/>	Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
<input type="checkbox"/>	10	—	0.0499	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	100	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	20	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	30	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	40	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	50	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	60	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	70	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	80	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/>	90	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time

Confirm All OK Cancel Apply

Rates Management

Recommended rates management practice includes few tips that can make routine job easier.

Tip 1: If you have received an update to your rate table, do not delete or edit already present information. Simply import updated price list on top of your current one, this will update your rates with new effective dates, while no longer actual rates will be hidden. Read more about importing process in *Import* subsection.

Tip 2: If an existing rate was changed and *Effective From* field specifies a date that have passed, then all calls will not be automatically rerated using this new rate. You should rerate them manually with *Calls Rerating* section.

Tip 3: As an example of calculation, let's imagine that *Rate* = 1, *Min Time* = 30, *Interval* = 1, *Grace Time* = 2, *Setup Fee* = 0,3, where:

- *Rate* is a price of call per 1 minute.
- *Min Time* – minimal time of call that will be tarificated.
- *Interval* – tarification interval which is used, when *Min Time* time expires.
- *Grace Time* – time interval that will not be tarificated (free time). For instance, if you specified 5 sec as a *Grace time*, that means, all calls with duration up to 5 seconds (including calls with session time of 5 seconds) will be free of charge.
- *Setup Fee* – call fee, which is charged when call duration is longer than 0 seconds, and there is no specified grace time.

So, according to the given data if call duration was less than 2 seconds, then total call cost will be 0 currency units. If call duration was between 2 and 30

$$\text{Setup fee} + \frac{\text{Rate}}{\text{Rate Formulas}} \cdot \text{Min Time}$$

seconds, then total call cost will be where *Rate Formulas* is the amount of seconds in a minute
that will be used while billing the calls, which is 0,8 currency units regarding the presented data. If call duration was more than 30 seconds, then total call

$$\text{Setup fee} + \frac{\text{Rate}}{\text{Rate Formulas}} \cdot \text{quantity of call seconds}$$

cost will be

currency units.

Tip 4: You can change rate tables' currency in *Parameters* tab.

Tip 5: All rate fields, that define time, have time format in seconds, while in *Rate* field you specify the cost for 1 full minute of call.

Tip 6: If you require to perform bulk update or edit of your rates, you can use Mass Edit feature. First, you'll have to form a query in search form. To do this, enter date that searched rates must correspond to as *current on*, *old for*, *future for*, *current+future for* or *all*, and code for your search (use * as wildcard). Then press "Search" button. System will find all rates that correspond to specified criteria and display them. Then click on "Mass Edit" link at the bottom of the window and proceed with respective action.

Operation type is selected under *Action* drop-menu:

- *insert as new rates* – edited rates will be added as new ones, that will replace existant under specified conditions (for example, change of rate and effective date);
- *update current rates* – edited rates will have their values updated with new ones;
- *delete found rates* – all found rates will be deleted.

After you selected desired action, you can change next available rate parameters (unavailable for *delete found rates* action):

Parameter	Description
Rate	Change the rate value. Available options: preserve, set to, inc for, dec for. You can increase or decrease the value either by fixed number or percent. To increase or decrease by percent enter % sign before desired number
Setup Fee	Change setup fee value. Available options: preserve, set to, inc for, dec for. You can increase or decrease the value either by fixed number or percent. To increase or decrease by percent enter % sign before desired number
Grace Time	Change <i>grace time</i> value. Available options: preserve, set to
Min. Time	Change <i>minimal time</i> value. Available options: preserve, set to
Interval	Change <i>tarification interval</i> value. Available options: preserve, set to
Effective Date	Change <i>rate start date</i> value. Available options: preserve, set to
End Date	Change <i>rate end date</i> value. Available options: preserve, set to
Profile	Change rate profile. Available options: preserve, set to

After all desired changes press "Preview" button to preview the results, and "Process" button to accept them.

Knowledge Base Articles

- [Jurisdictional Billing](#)
- [US Billing & Taxation](#)

Extra Rates

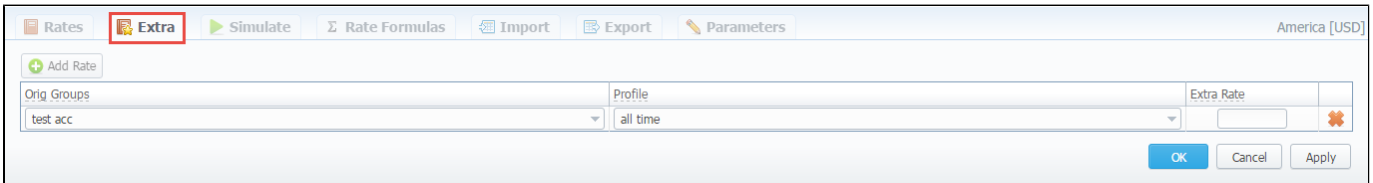
Tab Description

This tab allows to apply an "extra charge" for calls belonging to defined origination group.

To use this function, first you should go to **Configuration – Client Groups** and create the **Orig type group**. Then you need to decide which calls will belong to that group by either assigning this groups to customer's origination account or by using *Presets* and *Traffic Processing*.

After all above mentioned is made, simply access **Extra** tab in **Rate Tables** section and specify an extra charge that will be used for all calls in defined origination group by clicking the **"Add Rate"** button.

Screenshot: *Extra* tab - *Rate Tables* section



Field	Description
Orig Group	Define an account group which will have an "extra charge" for calls. If the account matches multiple group rules, then extra charges will be added.
Profile	Specify a time profile for the current rate
Extra Rate	Set extra rate for calls of defined account group. This rate is added to regular one and then the call is billed.



Please note, that the calls within the assigned package aren't charged by "extra cost". Otherwise, the system bills a call with extra rate when the customer overcomes the limits of the assigned package or call destinations that are not included in the client's package.



The **Extra rate** could only be applied to extra minutes of the call, that are not included in the package.

Simulate

Rates analysis section gives you possibility to see exactly which rate will be used for specified DNIS, and also resulting cost, if such call would take place:

Screenshot: Simulating calls

The screenshot shows the 'Simulate' tab in a software interface. On the left, there are input fields for 'Number' (empty), 'Date' (2014-07-09 10:50:52), and 'Duration' (60 sec). A blue 'Process' button is located below these fields. On the right, a message box with an information icon contains the text 'Please select parameters for report'. The top navigation bar includes 'Rates', 'Extra', 'Simulate', 'Rate Formulas', 'Import', 'Export', and 'Parameters'. The user is logged in as 'Custom-ExaServe [USD]'.

Description of analyze parameters is the following:

Field	Description
Number	Specify number for simulation
Date	Specify the call date
Duration	Specify call duration in seconds

After specifying all necessary parameters, press "Process" button and wait for query results, that is a table with information concerning simulated call:

Screenshot: Call simulating results

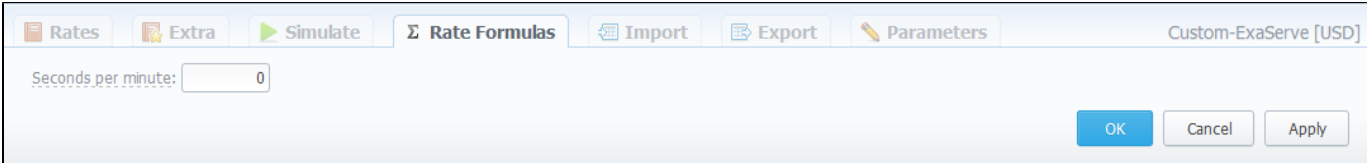
The screenshot shows the 'Simulate' tab with the 'Process' button clicked. The input fields now contain: 'Number: 1204', 'Date: 2014-07-09 11:01:39', and 'Duration: 60 sec'. The results are displayed in a table with the following columns: Code, Call Cost, Effective Date, Rate, Parameters, and Billed Time. The table contains one row of data for code 1204 (CANADA MANITOBA PROPER) with a call cost of 0.0010 USD, an effective date of 09/04/2014 21:00:00 +0000, a rate of 0.0010 USD, parameters of 1 / 1 / 0, and a billed time of 60 sec. A blue 'Process' button is still visible below the input fields.

Column	Description
Code	A destination code
Call Cost	Cost of a call
Effective Date	Rate start date
Rate	Price per 1 minute of call
Parameters	Information of minimal time of call that will be tarificated, tarification interval and time interval below which call is not tarificated
Billed Time	Billed time (minimal time of billing increment)

Rate Formulas

This section allows you to set the amount of seconds in one minute that will be used during calls' billing process. You need to set this amount in "Seconds per minute" field, then click "Apply" or "OK" button.

Screenshot: Rate Formulas section



Import

On this page

- [Import Section Tab](#)
- [Rates Importing Process](#)
 - [Step 1. Selecting File and Specifying Additional Parameters](#)
 - [Step 2. Recognizing The File](#)
- [Import History](#)
- [Mass Import](#)

Import Section Tab

Allows rates importing from Microsoft Excel *.CSV or *.XLS files.

Screenshot: Rate tables Import section tab

The screenshot shows the 'Import' section of the 'Rate Tables' interface. The 'Import' tab is selected in the top navigation bar. The interface is divided into two main sections: 'FILE PROCESS' and 'IMPORT PROCESS'. In the 'FILE PROCESS' section, there is a 'Select file to import' field with a 'Choose File' button and 'No file chosen' text. Below it is a 'Fields Delimiter' dropdown menu set to 'autodetect'. In the 'IMPORT PROCESS' section, there are several configuration options: 'Rate Group' (Default), 'Date Format' (auto), 'Custom date format' (empty), 'On duplicate rates' (Update with latest value), 'Full A-Z import' (Extended (close active/future rates)), 'Close date' (2016-07-18 11:00:00+0000), 'Import template' (empty), 'Deck update mode' (Do not import anything to code deck), 'Code deck' (DEFAULT), 'On errors' (Import correct rows and show all found en), 'Notificator Code Deck' (empty), 'Enable confirm mode' (checkbox), and 'Optimize codes' (checkbox). A 'Process >>' button is located on the right side of the 'IMPORT PROCESS' section, and a 'Close' button is at the bottom right.



When you choose **"Alert me about duplicates"** in the **"On duplicate rates"** field in the **Rate Tables** section/Import tab, please be aware there is a limitation of the alerts of rate duplication in the list **while importing**. It means that the import process cannot proceed if you get more than 1 000 duplicate alerts.

Rates Importing Process


Whole import process can be logically divided into two steps.


Step 1. Selecting File and Specifying Additional Parameters


Open Import tab and select a file to import on your HDD.

This step also allows you to edit all information that was not present in import file (system will automatically paste most commonly used values), and set some configurations in regards to import process. These settings are following:

Field	Description
Select file to import	Select an import file
Fields Delimiter	Specify here a delimiter symbol
Rate Group	A group to which the imported rate belongs (mostly used for importing rates for Jurisdictional billing module)

Date Format	<p>Specify date format of imported file. Please note that autodetection of date and time can be performed with files that contains one of the date and time formats listed below:</p> <ul style="list-style-type: none"> • %d-%m-%Y = 28-12-2002 • %Y-%m-%d = 2002-12-28 • %m/%d/%Y = 12/28/2002 • %d.%m.%Y = 28.12.2002 • %Y/%m/%d = 2002/12/28 • %Y%m%d = 20021228 • %Y-%m = 2002-12 • %H:%M:%S = 21:13:14 • %H.%M.%S = 21.13.14 								
Custom date format	If defined, this format will be used for date parsing instead of "Date Format" field								
On duplicate rates	<p>Decide what to do if a duplicate is found</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> • Update with the latest value </td> <td>If multiple duplicates were found, the last value is stored</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Skip duplicate rows </td> <td>If there are multiple duplicates, only first value will be stored</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Alert me about duplicates </td> <td>If duplicate is found, VCS will alert you about their presence</td> </tr> </table>	<ul style="list-style-type: none"> • Update with the latest value 	If multiple duplicates were found, the last value is stored	<ul style="list-style-type: none"> • Skip duplicate rows 	If there are multiple duplicates, only first value will be stored	<ul style="list-style-type: none"> • Alert me about duplicates 	If duplicate is found, VCS will alert you about their presence		
<ul style="list-style-type: none"> • Update with the latest value 	If multiple duplicates were found, the last value is stored								
<ul style="list-style-type: none"> • Skip duplicate rows 	If there are multiple duplicates, only first value will be stored								
<ul style="list-style-type: none"> • Alert me about duplicates 	If duplicate is found, VCS will alert you about their presence								
Full A-Z import	<p>This tool allows to close active/future rates according to the specified mode:</p> <ul style="list-style-type: none"> • Simple mode: active rates from current Rate Table will be closed by the Close date if they aren't present in this import. • Extended mode: already existing future rates and active rates (not presented in this import) from current Rate Table will be closed by the Close date. Then, these rates will be marked as stashed. <div style="border: 1px solid green; border-radius: 10px; padding: 10px; margin-top: 10px;"> <p> Please note, <i>Full A-Z import</i> with extended mode will delete future rates according to the Close date.</p> </div>								
Close date	End date of existing rates which are not presented in the current importing process. Please notice this field works only if "Full A-Z import" checkbox is enabled								
Import template	Select the rate table template for rates importing								
Deck update mode	<p>Decide how you want a code deck to be updated</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> • Do not import anything </td> <td>Leave selected code deck unchanged</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Import only not existing codes </td> <td>Code deck will be updated with codes and their names, if it doesn't currently have this information</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Import all codes (update existing) </td> <td>Code deck will be updated and codes will be updated with code names taken from file with overwriting of existent code names</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Import all codes (purge code deck first) </td> <td>Code deck is fully cleared and then all codes and code names are imported from file</td> </tr> </table>	<ul style="list-style-type: none"> • Do not import anything 	Leave selected code deck unchanged	<ul style="list-style-type: none"> • Import only not existing codes 	Code deck will be updated with codes and their names, if it doesn't currently have this information	<ul style="list-style-type: none"> • Import all codes (update existing) 	Code deck will be updated and codes will be updated with code names taken from file with overwriting of existent code names	<ul style="list-style-type: none"> • Import all codes (purge code deck first) 	Code deck is fully cleared and then all codes and code names are imported from file
<ul style="list-style-type: none"> • Do not import anything 	Leave selected code deck unchanged								
<ul style="list-style-type: none"> • Import only not existing codes 	Code deck will be updated with codes and their names, if it doesn't currently have this information								
<ul style="list-style-type: none"> • Import all codes (update existing) 	Code deck will be updated and codes will be updated with code names taken from file with overwriting of existent code names								
<ul style="list-style-type: none"> • Import all codes (purge code deck first) 	Code deck is fully cleared and then all codes and code names are imported from file								
Code Deck	Select a code deck that you want to update with above settings (note that code deck specified settings here will only be available if you are importing file which contains <i>code names</i> in addition to <i>codes</i>)								
On errors	<p>Decide, what system should do if file contains an error (data inconsistency, incorrect symbols etc.)</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> • Import correct rows and show all found errors </td> <td>Import error-free rows and display the list of errors, if any</td> </tr> </table>	<ul style="list-style-type: none"> • Import correct rows and show all found errors 	Import error-free rows and display the list of errors, if any						
<ul style="list-style-type: none"> • Import correct rows and show all found errors 	Import error-free rows and display the list of errors, if any								

	<ul style="list-style-type: none"> If errors are found, abort import and show all errors 	If any error is found, stop import and display a list of errors
Notifier Code Deck	Specify code decks, that will be used for the next rates notification	
"Enable confirm mode" heck box	Enables confirmation mode for imported rates. While in this mode, all rates that are imported into system, will have to additionally pass confirmation check by billing operator	
"Optimize Codes" heck box	<p>This option allows to make shorter codes of importing code range. For example, code range 4400-4409 will be shortened to 440. The result will be under all import rules, including "On duplicate rates" settings.</p> <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p> Therefore, when you make an import with enabled "Optimize codes" option and your importing file consists of code 440 and code range 4400-4409 at the same time, the import result will depend on the "On duplicate rates" settings.</p> </div>	

 If you **import the rates** and the **"Full A-Z import" option is enabled**, then all existing rates which are not presented in the current importing process will be closed by specified *Close Date*.

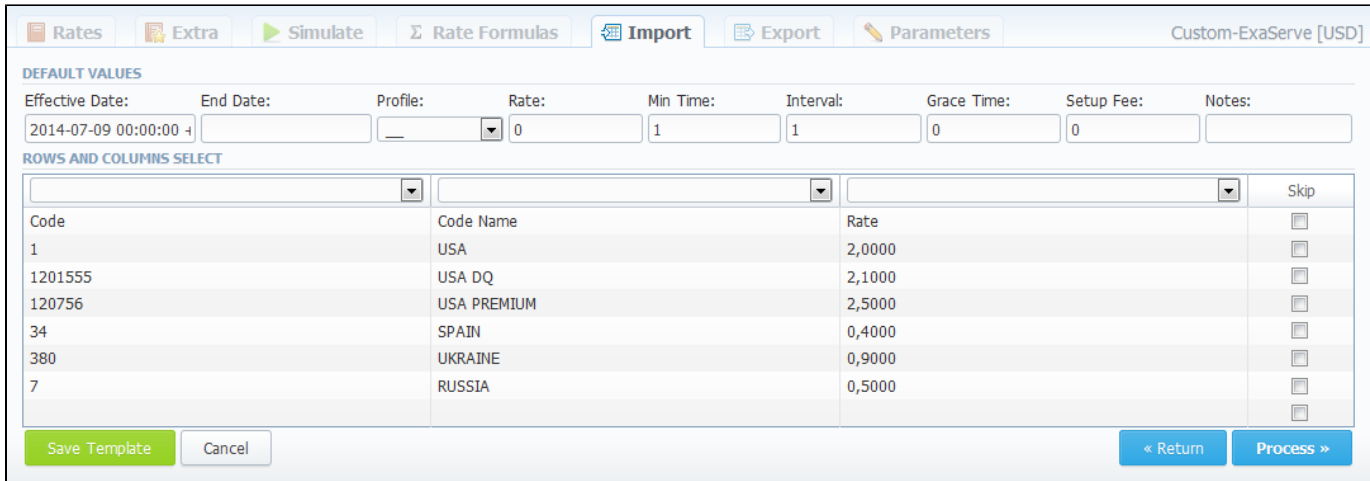
When you **import the rates** via **Automatic Email Import**, all existing rates which are not presented in this importing process will be closed by the *current date*.

After selecting a file and specifying all additional parameters click "Process>>" button.

Step 2. Recognizing The File

The system will recognize the file, and display few first rows of it. If there's need, make changes to the recognition of data (for instance, you can switch columns if the guess was not precise), and click "Process>>" again. Also, on this step you can save the importing rate table as a template for further usage in importing or exporting process, you only need to click the "Save Template" button, specify a template name in the pop-up window and click the "Save" button (Screenshot).

Screenshot: Rates importing process. Step 2





The screenshot shows the 'Import' tab in a software interface. At the top, there are tabs for 'Rates', 'Extra', 'Simulate', 'Rate Formulas', 'Import', 'Export', and 'Parameters'. The current view is 'Import' for 'Custom-ExaServe [USD]'. Below the tabs, there are 'DEFAULT VALUES' for various parameters: Effective Date (2014-07-09 00:00:00), End Date, Profile, Rate (0), Min Time (1), Interval (1), Grace Time (0), Setup Fee (0), and Notes. Below this is a 'ROWS AND COLUMNS SELECT' section with a table of recognized rates. The table has columns for Code, Code Name, Rate, and a Skip checkbox. The data rows are:

Code	Code Name	Rate	Skip
1	USA	2,0000	<input type="checkbox"/>
1201555	USA DQ	2,1000	<input type="checkbox"/>
120756	USA PREMIUM	2,5000	<input type="checkbox"/>
34	SPAIN	0,4000	<input type="checkbox"/>
380	UKRAINE	0,9000	<input type="checkbox"/>
7	RUSSIA	0,5000	<input type="checkbox"/>

At the bottom of the interface, there are buttons for 'Save Template', 'Cancel', '<< Return', and 'Process >>'.

After you press "Process>>" for the last time, the system will start importing process. When the progress bar reaches 100%, your import is done! Don't forget to confirm the rates, if you chose to import in "confirm mode".

 Please pay your attention during specifying the *Effective Date* and *End Date* that by default the *Time zone* is *UTC (+0000)*.

 Please note, it's not possible to import a file into the **Rate Table** with the **Min Time and Interval = 0**. These fields should have at least 1 second.

Import History

If you have already imported at least one file, during a new importing process you will also see the history table.

This table displays the quantity of imported rates in the system and provides information about them. However, your next actions after import (for example, rate change, deletion) will not be shown in the history.

Screenshot: Import History Table

IMPORT HISTORY (LAST IMPORT OPERATIONS)										
			Rows 1 – 2 of 2		20		Page 1 of 1			
Date	Login	File	New	Increased	Decreased	Unchanged	Pending	Closed	Total	
2016-04-19 15:53:56+00		duplicate.csv	2	0	0	0	0	0	2	
2016-04-19 15:53:25+00		duplicate.csv	2	0	0	0	0	0	0	

[Close](#)

Column	Description
Date	Date and time when the file was imported
Login	By whom the importing process was made
File	The name of an importing file
New	The number of new rates which was added from the file
Increased	The number of rates, that have been increased
Decreased	The number of rates, that have been decreased
Unchanged	The number of rates, that remained unchanged
Pending	The number of rates, that should be additionally confirmed
Closed	The number of rates, that were closed by specified "End Date" or using "Full A-Z import" functionality
Total	The total amount of imported rates



Please note, if you click the undo icon in the *Import History* to delete the import, this action will not automatically re-open old rates that were closed while importing process.

Screenshot: Import History Table

Rates Extra Simulate Rate Formulas **Import** Export Parameters 12344 [USD]

FILE PROCESS

Select file to import: No file chosen

Fields Delimiter:

IMPORT PROCESS

Rate Group:
 Import template:

Date Format: auto
 Deck update mode:

Custom date format:
 Code deck:

On duplicate rates:
 On errors:

Full A-Z import:
 Notificator Code Deck:

Close date:
 Enable confirm mode:

Optimize codes:

IMPORT HISTORY (LAST IMPORT OPERATIONS)

Rows 1 – 2 of 2 Page 1 of 1

Date	Login	File	New	Increased	Decreased	Unchanged	Pending	Closed	Total	
2016-04-19 15:53:56+00		duplicate.csv	2	0	0	0	0	0	2	
2016-04-19 15:53:25+00		duplicate.csv	2	0	0	0	0	0	0	

Mass Import

If you need to upload several rates tables return to the main *Rate Tables* list and check boxes of required tables and then click "Import" button. Then please keep the procedure in the same as usual rates importing.

Screenshot: Mass rates importing

Rate Tables

Code	Code Name	Description	Rate table
		RATE TABLE: O_TERM RATE	
		Imported rows: 2; Rows with errors: 0	
		RATE TABLE: RATE TABLE 1	
		Imported rows: 2; Rows with errors: 0	
		RATE TABLE: RATE TABLE_1	
		Imported rows: 2; Rows with errors: 0	
		RATE TABLE: RATE TABLE EXAMPLE	
		Imported rows: 2; Rows with errors: 0	

Export

On this page

- [Export Section Tab](#)
- [Rates Exporting Process](#)
 - [Step 1. Specifying Filter Parameters](#)
 - [Step 2. Specifying Date And Format Options](#)
 - [Step 3. Selecting Columns To Export](#)

Export Section Tab

Rates exporting to Microsoft Excel *.CSV or *.XLS files (Screenshot).

You can use same search engine as provided on Rates tab, to decide which rates you would like to export (including confirmed/unconfirmed, old, current, future or current+future).

Screenshot: Rates exporting window

The screenshot shows the 'Export' window in a software application. The window title is 'Custom-ExaServe [USD]'. The interface is divided into several sections:

- TEMPLATE SETTINGS:** Includes an 'Export Template:' dropdown menu and a 'Save' button.
- STEP 1: SPECIFY FILTER PARAMETERS:** Contains fields for 'Code / Name', 'Rate Group' (set to 'Default'), 'Changes', 'Imported File', 'Confirmed', 'Rate' (with USD unit), 'Min Time' (with sec unit), 'Profile', 'Setup Fee' (with USD unit), 'Interval' (with sec unit), and 'Grace Time' (with sec unit). There is also an 'End Date:' field.
- STEP 2: SPECIFY DATE AND FORMAT OPTIONS:** Includes 'Last export date:', 'Code Deck', 'Data format' (set to 'Excel CSV'), 'Date Format:', 'Codes Output' (set to 'separate rows'), and 'Fields Delimiter' (set to ';'). There are checkboxes for 'with headers row' (checked) and 'codes from code deck'.
- STEP 3: SELECT COLUMNS TO EXPORT:** A list of 14 columns, each with a dropdown menu. Column #1 is 'Code', Column #2 is 'Code Name', and Column #3 is 'Rate'. The other columns are empty.
- HEADER TEXT:** A section for defining header text.
- FOOTER TEXT:** A section for defining footer text.
- Buttons:** 'Process' and 'Cancel' buttons are located at the bottom right.

Rates Exporting Process

Whole export process can be logically divided in three steps.

Step 1. Specifying Filter Parameters

Here you need to fill next fields:

Field	Description
Code / Name	Specify code / name of exporting file
Rate Group	Specify rate group in case of jurisdictional billing
Imported File	Select imported file
Changes	Select changes (<i>Decreased, Increased, Not changed, New</i>)

Confirmed	Select, confirmed your file or not
Rate	Specify price interval
Setup Fee	Specify setup fee interval
Min Time, sec	Specify minimal time interval of tarificated calls
Interval, sec	Specify tarification interval
Profile	Select time profile (<i>all time, business time, non-business time, weekends</i>)
Grace Time, sec	Specify grace time interval

Step 2. Specifying Date And Format Options

Fill here next fields:

Field	Description
Last export date	Parameter that affects "Rate changes" field (depending on it exported rates will be marked as <i>new, changed, deleted</i> etc)
Date Format	Date format in your export file. Syntax is following: for example, if you put "%d-%m-%Y" here, your date will look like 25-05-2011
Code Deck	Select a code deck here to rewrite code names in export file if needed
Codes Output	Specify how codes should be displayed. There are few options
	<ul style="list-style-type: none"> • Separate rows Each code is placed into single row
	<ul style="list-style-type: none"> • Delimited list Codes are grouped by code name in a row, for example: 5510,5511,5512
<ul style="list-style-type: none"> • Ranges list Codes are grouped by code name into ranges plus delimiter, for example: 5510-5512, 5515	
Data Format	Specify output file format, XLS or CSV
Fields Delimiter	Set delimiter for fields if you've chosen CSV
"With headers row" Checkbox	Include column names into the file
"Codes from code deck" Checkbox	Allows to additionally filter the export, by selecting only codes which are present in specified <i>Code Deck</i>
Header text / Footer text	Allows you to additionally put some text into exported file as header and footer respectively



You may save settings as a template of Rate Notification. But note that reseller's rate notification template will be overridden by existing rate export template.

Step 3. Selecting Columns To Export

Here you can specify columns to export. Column names are self explanatory, but please note that *Rate Changes* column holds data regarding your rate actuality (*new, changed, deleted* etc).

Press "Process" button and save exporting file when you finish setting the parameters.



Tip: rates sorting will be made by the very first column. For example, if you want rates to be sorted by A-Z destination name than make Code Name as first column.

note that reseller's rate notification template will be overridden by existing rate export template

Parameters

This tab allows you to correct or change any settings that you entered when you created current Rate Table, such as its *Name*, *Reseller*, *Currency* etc.. Also here you can enable "Automatic Email Import" checkbox which allows automatic rate tables import from emails (Screenshot):

Screenshot: Parameters tab

Section	Fields description	
General Rate Tables Settings	General rate table information	
	<ul style="list-style-type: none"> Name 	A name of the rate table
	<ul style="list-style-type: none"> Reseller 	A reseller whom this rate table belongs to
	<ul style="list-style-type: none"> Parent Rate Table 	A rate table to inherit rates from. Please note, that codes with the same length in the current rate table will have priority. However, longest codes form the parent rate table will override codes from this rate table.
	<ul style="list-style-type: none"> Code Deck 	A code deck for current rate table
	<ul style="list-style-type: none"> Currency 	A currency specified for this rate table
	<ul style="list-style-type: none"> "Rate with taxes" checkbox 	Enabled checkbox means that taxes are already included in rate value. Disabled checkbox means that taxes are not included in rate value and will be added as an additional invoice item
<ul style="list-style-type: none"> Description 	Additional information concerning the current rate table	
"Automatic Email Import" Checkbox	Data used for automatic rates import	
Table Information	Information concerning the date of the rate table creation and last editing	

Automatic Email Import

On this page


- ["Automatic Email Import" Checkbox](#)
- [Creating Import Template](#)

"Automatic Email Import" Checkbox

Allows automatically importing rate tables from emails, i.e. the rate table data will be automatically updated by data from emails, taken from specified email-box, using defined template. This function can be enabled in *Rate tables - Parameters tab* (Screenshot below), you need to fill in all fields in that section.

Screenshot: "Automatic Email Import" checkbox

The screenshot shows the 'Parameters' tab for a rate table named 'Custom-ExaServe [USD]'. The 'GENERAL RATE TABLE SETTINGS' section includes fields for Name, Reseller (Reseller B), Code deck (Default US), Currency (USD), and a checkbox for 'Rates with taxes'. The 'AUTOMATIC EMAIL IMPORT' section is checked and contains the following fields: Login, Password, Sender Match, Subject Match, and Import Template. Below this section is the 'TABLE INFORMATION' area, which shows the table was created on 04/02/2013 15:57:23 +0200 and last edited on 08/28/2014 12:56:02 +0200. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

Field	Description
Login	Specify the login of an email box
Password	Enter a password of the specified email <div style="border: 1px solid yellow; padding: 5px; margin-top: 10px;"> Please note that the password should contain at least 10 symbols.</div>
Sender Match	Specify a sender name or email address for searching
Subject Match	Define a regular expression for searching of specific mail titles
Import Template	Specify a rate table template

Also you need to configure mail server in *Reseller - Email Rates Import Settings* section (Screenshot).

Screenshot: *Edit Reseller* section

Edit Reseller Custom Fields Rates Notifications all resellers

SYSTEM INFORMATION

Name: all resellers
Parent: ...root...
Currency: USD
Status: Active
Tax Profile:
VoIP Gateways: FS-Amsterdam, OS-KSA-MOBILY, FS-KSA-MOBILY, 456, squire test, musurit 2, Duplicate, 1234567, 234, only_sip, Localhost

ORIGINATOR SETTINGS

Allowed Credit: USD
ORIG Rates:
Routing Plan:
ORIG Capacity:

CONTACT INFORMATION

E-mail:
Postal Address:
Tax ID:
Reg ID:
Bank Account:

INVOICING INFORMATION

Date: Real date
Template: 1 | XLS
No. Tpl:
Last No: 10000

TERMINATOR SETTINGS

TERM Rates:
TERM Capacity:

FRAUD PROTECTION

Notification frequency: 10
Skip digits: 0

COMPANY LOGO


Обзор... Файл не выбран.

EMAIL RATES IMPORT SETTINGS


Host:
Port: 993

Full Delete OK Cancel Apply

Field	Description
Host	Specify an email server. Note that it should support IMAP and SSL
Port	Define a port, by default the 993 port is set

 Please pay your attention that if you are using *imap.gmail.com* as *Host*, you should **turn on** access for all *external applications* in your email settings.

Creating Import Template

 Please note that *Automatic Email Import* will not work without specified *Import template*.

The process of creating an *Import template* is quite simple.

Firstly, you should import at least one rate table.

Secondly, during importing a rate table on the second step of importing process, you should click on "*Save template*" button (Screenshot below). In the pop-up window specify a template name and save it, then click "*Process>>*" button. After the importing process will be finished, a new rate table template will be added and seen in templates list in respective field.

Screenshot: Rates importing process. Step 2

Rates Extra Simulate Rate Formulas **Import** Export Parameters Custom-ExaServe [USD]


DEFAULT VALUES

Effective Date: 2014-07-09 00:00:00 | End Date: | Profile: | Rate: 0 | Min Time: 1 | Interval: 1 | Grace Time: 0 | Setup Fee: 0 | Notes:

ROWS AND COLUMNS SELECT

Code	Code Name	Rate	Skip
1	USA	2,0000	<input type="checkbox"/>
1201555	USA DQ	2,1000	<input type="checkbox"/>
120756	USA PREMIUM	2,5000	<input type="checkbox"/>
34	SPAIN	0,4000	<input type="checkbox"/>
380	UKRAINE	0,9000	<input type="checkbox"/>
7	RUSSIA	0,5000	<input type="checkbox"/>

Template name:


 Detailed description of rate tables importing process you may find here: [Import](#)

Invoices

On this page

- [Invoices List](#)
- [Creating New Invoice](#)
- [Knowledge Base Articles](#)

Invoices List


This section allows you to create and manage all outgoing and incoming invoices. By clicking the *Download icon*  you can load and view respective invoice file, and by using the *“Export List”* you can download currently stored a list of invoices in *CSV format.


The main window of this section presents a list of generated invoices:







Screenshot: Invoices section main window

Invoices										Search...			
New Invoice Export List Mass Edit										Rows 1 – 20 of 28	Pages: 2	1	2
	Invoice No	Client / Reseller	Amount	Period	Due Date	Invoice Date							
	INV-2013-213	Customer G	99.34 DKK	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:39:29 UTC							
	INV-2013-212	Customer H	1 842.76 DKK Paid: 930.52 DKK	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:39:03 UTC							
	INV-2013-211	Customer M	85.00 DKK	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:38:44 UTC							
	INV-2013-209	Customer L	2 156.86 USD	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:37:41 UTC							
	INV-2013-207	Customer I	2 277.64 USD	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:35:58 UTC							
	INV-2013-204	Customer C	1 425.65 DKK Paid: 1352.5 DKK	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:35:14 UTC							
	INV-2013-203	Customer B	63.12 USD	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:34:47 UTC							
	INV-2013-202	Customer A	85.00 DKK Paid: 35 DKK	2013-07-01 – 2013-07-31 GMT +00:00	13 days ago 2013-08-16	2013-08-01 08:33:56 UTC							
	INV-2013-200	Rohde	54.48 DKK	2013-07-01 – 2013-07-31 GMT +00:00	14 days ago 2013-08-16	2013-08-01 02:20:02 UTC							
	INV-2013-199	Customer L	1 192.67 USD	2013-05-01 – 2013-05-31 GMT +00:00	27 days ago 2013-08-02	2013-07-18 10:37:33 UTC							
	INV-2013-194	Customer H	807.48 DKK	2013-06-01 – 2013-06-30 GMT +00:00	2013-07-16	2013-07-01 12:39:32 UTC							
	INV-2013-193	Customer A	85.00 DKK	2013-06-01 – 2013-06-30 GMT +00:00	2013-07-16	2013-07-01 12:37:04 UTC							
	INV-2013-192	Customer K	771.91 DKK	2013-01-01 – 2013-05-31 GMT +00:00	44 days ago 2013-07-16	2013-07-01 11:05:42 UTC							
	INV-2013-191	Customer D	385.00 DKK	2013-06-01 – 2013-06-30 GMT +00:00	44 days ago 2013-07-16	2013-07-01 10:47:30 UTC							
	INV-2013-190	Customer F	425.59 DKK	2013-06-01 – 2013-06-30 GMT +00:00	44 days ago 2013-07-16	2013-07-01 10:46:52 UTC							
	INV-2013-189	Customer L	2 158.26 USD	2013-06-01 – 2013-06-30 GMT +00:00	44 days ago 2013-07-16	2013-07-01 10:45:50 UTC							

Column Name	Description
Invoice No	Number of invoice
Client / Reseller	Name of Client or Reseller
Amount	Total sum of invoice
Period	Invoice period
Due Date	Shows due date for each invoice
Invoice Date	Date of creation the invoice

 Please note, If you don't fill the **"Invoice Date"** field, it will be the same that the time of an invoice creation. In case you determine it, the system sets the midnight of a specified day.

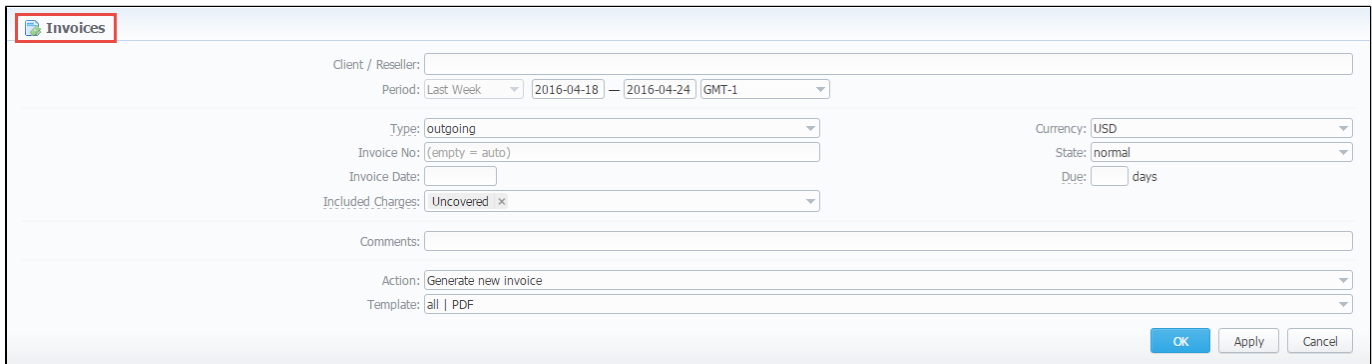
Icon	Description
	This icon tells you that respective invoice was paid in full. If the invoice is not fully paid, this icon will be grey

	This icon defines <i>to verify state</i> and tells you that this invoice is waiting to be checked before it will be sent to client
	This icon defines <i>to send state</i> , and this means that invoice is in sending queue
	Outgoing invoice
	Incoming invoice
	By clicking this icon you can download and view respective invoice file
	By clicking this icon you can delete respective invoice

Creating New Invoice

Invoices are created through “*New Invoice*” button. When you click it, a pop-up window shows up:

Screenshot: *Create Invoice window*



Name of column	Description
Client /Reseller	Name of the <i>Client</i> or <i>Reseller</i>
Period	Define period of statistics that will be included in to invoice
Type	Specify the type of invoice (<i>outgoing/incoming</i>)
Currency	Using the drop down menu select the currency in which you would like to generate invoice
Invoice	Number of Invoice. The number length can't exceed 200 symbols
State	Select the state of this newly created invoice (<i>to send, to verify</i> or <i>normal</i>)
Invoice Date	Specify the actual invoicing date
Due (days)	Indicate the payment due in days

Included Charges	<p>Select the type of charges for invoices:</p> <ul style="list-style-type: none"> • uncovered - all charges that are not included in any previous invoice; • covered - all charges already included in the previous invoice; • pending - all pending charges. <p>Please note, these charges don't include calls. Therefore, <i>call</i> charges will be added to any invoice regardless the "Included Charges" settings.</p> <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p>✔ It's not possible to include a charge twice with standard settings. To re-include already used charge in the invoice, you need to combine parameters "uncovered" + "covered" in the "Included Charges" field.</p> </div>
Comments	Leave comments
Action	<p>Using the drop down menu select an appropriate action: "Generate new invoice" or "Attach existing invoice".</p> <p>When "Attaching existing invoice" you can only additionally specify the invoice destination (incoming or outgoing), specify the sum of the invoice and attach the invoice file. This feature is mainly used when your invoice was generated by some other third-party software.</p>
Template	Select a template that should be used to create a current invoice. These templates define your invoice contents and look and are created and managed in <i>Configuration – Invoices Templates</i> section.

✔ **Tip:** All automatically created invoices will be **"to verify" state**. To send the invoice to a client you will need to change the state to *send* manually!

⚠ When generating invoices under *one reseller* for *different clients*, it is recommended to wait till the invoice for one client will be generated and only after that start generating the other one for another client, i.e. avoid generating them simultaneously. That is important for avoiding the situation of having *invoices with an identical number* in the system.

To easily change invoices state, use **"Mass Edit"** button (Screenshot below). First of all, you need to select invoices for which state should be changed, then specify state from drop-down list of respective "State" field, press "Process" button for applying the change. Also using the following window you may delete all existing invoices by pressing "Delete all" button.

Screenshot: Invoices "Mass Edit" window

Invoice No	Amount	State	Period	Due Date	Invoice Date
201402/100334	0.00 USD		02/03/2014 – 02/09/2014	02/25/2014	02/17/2014 23:00:00 +0000
201402/100333	0.00 USD		01/27/2014 – 02/05/2014	02/12/2014	02/04/2014 13:00:00 +0000
201302/100335	0.00 USD		02/04/2013 – 02/10/2013	02/22/2013	02/15/2013 20:12:15 +0000
201204/100333	1 000.00 USD		03/01/2012 – 03/31/2012	04/27/2012	04/20/2012 10:01:46 +0000

⚠ Please note, there is a package arrangement by numbers in "Invoices" and "Invoices Templates". While generating invoices, the system sorts packages in invoices. The names of packages could include numerical symbols. Please use numerical symbols as *001 name*, *002 name*, etc. in names of packages. And avoid names with special symbols as *%001 name*, *-001 name*.

i Please note, that the currency rate of extra charges will be taken on the date of charge, not on the date of invoicing.

Knowledge Base Articles

- [Incoming VS Outgoing Invoices](#)
- [Method of calculating and rounding values for Invoices](#)
- [Why generated invoice is not sent?](#)
- [Why there is no logo in generated invoice?](#)

Transactions

On this page

- [Transactions List](#)
- [Adding New Payment](#)
- ["Import Transactions" and "Export List" Buttons](#)

Transactions List

This section allows you to perform financial operations with client's / reseller's balances and also review all balance changes within the system. The main window is displayed as a list of performed payments:

Screenshot: *Transactions section main window*

ID	Payment Account	Client / Reseller	Client ID	Amount	Taxes amount	Comments	Transaction Date
15330	Charge: Products	Balance_orig	3816	-20.12 USD	0.00 USD	Package activation payment: test	05/25/2016 08:47:56 +0000
15331	Charge: Products	Balance_orig	3816	-10.55 USD	0.00 USD	Package periodical payment: test	05/25/2016 08:47:56 +0000
15328	Charge: Products	Balance_orig	3816	-10.00 USD	0.00 USD	Package periodical payment: test	05/25/2016 08:20:15 +0000
15327	Charge: Products	Balance_orig	3816	-20.00 USD	0.00 USD	Package activation payment: test	05/25/2016 08:20:15 +0000
15326	Charge: Products	Balance_orig	3816	-10.00 USD	0.00 USD	Package periodical payment: test	05/25/2016 08:20:15 +0000
15325	Charge: Products	Balance_orig	3816	-20.00 USD	0.00 USD	Package activation payment: test	05/25/2016 08:20:15 +0000
15324	Charge: Products	Balance_orig	3816	-10.00 USD	0.00 USD	Package periodical payment: test	05/25/2016 08:20:15 +0000
15323	Charge: Products	Balance_orig	3816	-20.00 USD	0.00 USD	Package activation payment: test	05/25/2016 08:20:15 +0000

Payments list columns have the following meaning:

Column Name	Description
ID	A payment through ID number
Payment Account	Displays respective payment account, related to a performed payment or respective charge type, such as <i>calls, products, extra charges</i> (each type has visual representation in a form of respective icon)
Client / Reseller	Displays the name of client or reseller that was engaged in payment operation
Amount	The respective payment operation sum
Taxes Amount	The respective taxes cost
Comments	Comments about respective payment
Transaction Date	Displays respective payment date, related to a performed payment



Tip: The **"Group Call Charges"** field in Advanced Search panel of this section allows you to see payments and charges not only "Hourly" (like in previous versions), but also to switch to "Daily", "Weekly" and "Monthly" outlook.

Adding New Payment

To add a payment click *"New Transaction"* button. In new window specify respective parameters and click *"Apply"* button.

Screenshot: New transaction window

Transactions

Client:

Amount: USD No taxes Type: Payment

Payment Account: General

Comments:

Info:

Transaction Date: 2016-06-06 10:11:38+0000 Status: Approved

OK
Cancel
Apply

Column name	Description
Client	The name of the client
Amount	The positive/negative amount <ul style="list-style-type: none"> positive amount is credited to client; negative amount is debited from client.
Type	The type of the transaction <ul style="list-style-type: none"> <i>payment</i> <i>charge</i>
Payment Account	The payment account. Choose a respective account from the drop-down list of available payment accounts
Comments	Notes for a new transaction
Info	Here you can add system information for transactions. Also, it's possible to add a variable in the invoices templates. Then, the variable will show this info for extra charges.
Transaction Date	The actual date of the transaction
Status	The state of the transaction: <ul style="list-style-type: none"> <i>pending</i> <i>approved</i>

You can set an amount and choose whether a specified amount includes a tax or not, choose a respective value in the drop-down list next to the currency of the amount.

Screenshot: New transaction window

Transactions

Client:

Amount: USD Type:

Payment Account:

Comments:

Info:

Transaction Date: Status:

i If you choose "Include taxes" option, the system will automatically calculate a tax and divide the total amount into 2 columns (*Amount/Taxes amount*). Then the system will change the option "Include taxes" to "Exclude taxes" in the settings of a respective transaction.

Tip: For incoming payment select "Payment" operation type, for outgoing charge – select "Charge".

Tip: If you change transaction Status in the respective field from "Approved" to "Pending" when adding a payment, that payment will have to pass additional approval check by billing operator.

As well as, *Extra Charges Outgoing/Incoming* options are available in the "**Payment Account**". Please note, that you will have the same type of payment account in invoices. So, you can choose where the following charge will be shown in an outgoing/incoming invoice. For example, if you want to give a refund to the client, please select an *extra charges outgoing*, it will guarantee that this charge will be visible in the invoice.

Screenshot: New transaction window

Transactions

Client:

Amount: USD Type:

Payment Account:

Comments:

Info:

Transaction Date: Status:

"Import Transactions" and "Export List" Buttons

While using the "Import Transactions" option, you can perform an import of payments. Simply click the "**Import Transactions**" button and follow on-screen instructions.



You can edit payment properties by clicking respective transaction icon in the list of all available payments.

The process of the import can be logically divided into two steps:

- a. **Selecting File and Specifying Additional Parameters.** Follow this step to set some configurations in regard to the import process.

Screenshot: Transactions importing process. Step 1

? Unknown Attachment

- b. **Recognizing The File.** The system will recognize the file and you can make changes to the recognition of data (for instance, switch columns) and press "Process>>" again.

Screenshot: Transactions importing process. Step 2

? Unknown Attachment

If you click "**Export List**" button, you will be able to export all currently stored payments as CSV file.

Balance Report

On this page:

- [Balance Report Form](#)
- [To create a new balance report](#)
- [Simple scheme: how to generate a balance report](#)
- [To create reports templates](#)
- [Export generated report](#)

Balance Report Form

This section represents a balance analysis tool. It shows a full history of client's charges and payments for the selected period.

Screenshot: *Balance Report section main window*

The screenshot shows the 'Balance Report' form interface. It features a 'FILTERS' section with the following fields: 'Interval' (set to 'This Month', '2016-01-01 00:00:00' to '2016-01-31 23:59:59' in 'UTC'), 'Mode' (set to 'Accountant'), 'Client Type' (set to 'Client'), and 'Group By'. There are also 'Save Query' and 'Load Query...' buttons. The 'OUTPUT' section includes 'Type' (set to 'Web'), 'Plain', and 'Currency' (set to 'USD'). A 'Query' button is located at the bottom right.

To create a new balance report

In order to create a balance report go to the **Management** and open the **Balance Report section**. Then, you need to form the analysis report specifying required values. To get information sorted by date, client and payment account ID, use the "Group by" option and choose respective values from the drop-down list.

Fill out the search form with next parameters:

Section	Field Description
Filters	Filters that will be used for generating a correct report. Click plus sign next to the "Filters" to select convenient filters for the report. Also you can cancel any filter by clicking sign for deleting.
	Interval Specify an interval for the report. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> Please note, that the "Interval" field is mandatory and should be filled out in order to make a report.</div>
	Mode Indicate the mode of the report: <ul style="list-style-type: none">• Accountant balance - this report mode is compiled by invoices and payments, it shows fixed balance• Live balance - this report mode is compiled by payments and charges, it shows live balance
	Client Type Choose the type of the report to gather the data: <ul style="list-style-type: none">• Client• Reseller• Calling Card• Call Shop

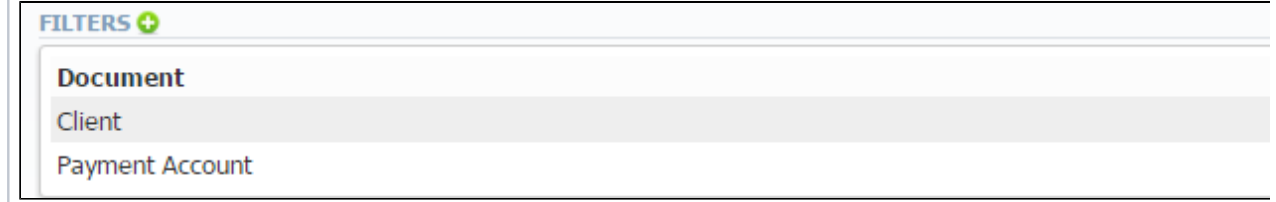
Group By	<p>Select a grouping option, here you can choose respective values to sort the data. There are following accessible options to data in reports:</p> <ul style="list-style-type: none"> • Time: <i>Month, Date.</i> • Document: <i>Client ID, Payment account ID.</i> <p>This option is intended to simply grouping option, the system will automatically group data in specified columns.</p>
-----------------	---

Additional Filters

There are following accessible additional filters:

- **By document:** *Client, Payment Account*

Screenshot: Balance Report form/ Filters





Client	Define an origination client for the report
Payment Account	Enter an orig account for the report

Output This form contains settings of output data of the report.
Click plus sign near the **"Columns"** to select respective columns to output a report data. Also you can cancel any chosen item.

Accessible columns in the report

There are following columns to add in the report:
Client, Client ID, Payment Account, Document Icon, Document Info, Start Balance, Debit, Credit, End Balance, Type, NO, Notes, Date.


Client	Name of the <i>client/reseller/calling card/call shop</i> for that current operation is assigned to
Client ID	Client identification that also is present in the full list of <i>Transactions</i> and <i>Invoices</i> .
Payment Account	Respective payment account, where performed payment was assigned
Document Icon	<p>File icons that generally display a type of the document in the report:</p> <ul style="list-style-type: none"> • This icon shows different payments in the system. • This icon appears when extra charges incoming/outgoing are presented. • This icon means different charges or payments of the calls. • This icon presents payments of the packages. • And the menu icon represents the invoices in the system.
Document Info	The document that an operation corresponds to (<i>charge, payment, invoice 100, for example</i>)
Type	Here you can see a document type
No	The number of transactions
Notes	The notes indicated in the comments of transactions or in invoices
Date	An operation date
Amount	
Start Balance	Start client's balance prior to respective operation
End Balance	Operation sum, that has positive income (incoming payment / invoice etc)
Debit	Operation sum, that has negative income (outgoing payment / invoice etc)

Credit	Final client's balance after respective operation
Other output settings	
Type	<p>Choose a format of the report from a drop-down list: Web/CSV/Excel XLS/Excel XLSx.</p> <p>Also, select next to the "Type" field the table view:</p> <ul style="list-style-type: none"> • <i>Plain</i> - a simple table view • <i>Grouped</i> - a table view with grouped data and possibility to collapse it <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web</i> formats, it doesn't work with</p> </div>
Send to	<p>You can send generated reports via e-mail. For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px; background-color: #fff9c4;"> <p> This feature is available only in CSV/Excel XLS/Excel XLSx formats of the report, it doesn't work with The Web.</p> </div>
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.

Screenshot: Balance Report section

Balance Report

COLUMNS (9)

FILTERS 

Interval: Last Week 2016-01-11 00:00:00 – 2016-01-17 23:59:59 UTC

Mode: Live Balance

Client Type: Client

Group By:

Save Query Load Query...


OUTPUT







Type: Web Plain




Currency: USD


Query

Export to CSV Export to XLSx



Client	Payment Account	Date	Document Icon	Document Info	Start Balance	Debit	Credit	End Balance
N/A	N/A	N/A			0.000 USD	721.008 USD	1 451.978 USD	-730.971 USD
orig1	Calls	01/13/2016 00:00:00 +0000		Charge	0.000 USD	106.572 USD	0.000 USD	106.572 USD
term1	Calls	01/14/2016 00:00:00 +0000		Charge	463.325 USD	0.000 USD	93.571 USD	369.754 USD
orig1	Calls	01/14/2016 00:00:00 +0000		Charge	106.572 USD	356.754 USD	0.000 USD	463.325 USD
orig1	NEW PAY_GW (for top-up cards)	01/14/2016 10:08:55 +0000		Payment 8 Paid with topup:201601-009852491	369.754 USD	0.000 USD	100.000 USD	269.754 USD
orig1	Products	01/14/2016 16:32:52 +0000		Charge 19 Package periodical payment: pack2	272.554 USD	2.800 USD	0.000 USD	275.354 USD
orig1	Products	01/14/2016 16:32:52 +0000		Charge 18 Package activation payment: pack2	269.754 USD	2.800 USD	0.000 USD	272.554 USD

 If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the  plus or  minus signs.

 Please note, the system shows rounded values in the reports. But while calculating the system takes an exact value. Hence, the procedure of the rounding is following:

- system rounds currency values according to the settings of a respective currency;
- other parameters are rounded to the nearest ten thousandth. For example, 3.879256 to 3.8793.

Simple scheme: how to generate a balance report

In order to create a simple report you need to:

- Choose respective "**Filters**" for the report.
- Enter the interval, mode, client type.
- Select some parameters in the "**Group By**" field, for example, *Client ID*.

- Then choose **"Columns"** in the Output form, for example, *Client, Payment Account, Document Icon, Document Info, Start Balance, Debit, Credit, End Balance, Date*.
- Leave **"Type"** *Web/Grouped* settings by default.
- Click the **"Query"** button.



Please note, the **"Order By"** option is active when the **"Type"** of the Output form is **Plain**. When it is **Grouped**, the system sort data by the values specified in the **"Group By"** field.

To create reports templates

Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Query Template form

Section	Description
Balance Report	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a Reseller for the report template
Watch	This tool allows to automatically generate reports at the appropriate time and send the results to the list of e-mails. <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i>. </div>
	Recipients Specify recipients, also you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of week to automatically generate a report. For example, you can run a report only on Monday or each day of week
	Report Query Here you need to specify filters that will be used for generating correct report and choose the output type to view the report

To load already existed templates while generating statistic reports, click the **"Load Query"** button in the *Balance Report* section.

Screenshot: Balance report form

Balance Report

FILTERS

Interval: Last Week | 2016-01-11 00:00:00 — 2016-01-17 23:59:59 UTC

Mode: Live Balance

Client Type: Client

Group By:

Save Query | Load Query... | Query

OUTPUT

Type: Web | Plain

Currency: USD

Export generated report

You can export data in CSV or XLSx file that contains only currently presented data, no automatic request to update data while exporting.

To download a .csv file, click the "Export to CSV" button on the toolbar.

i Please note, this button will be visible only when the "Type" of the output is "Plain". For the "Grouped" output type it is not available.

To download a .xlsx file, click the "Export to XLSx" button on the toolbar.

Screenshot: Balance Report section

Balance Report

FILTERS

Interval: Last Week | 2016-01-11 00:00:00 — 2016-01-17 23:59:59 UTC

Mode: Live Balance

Client Type: Client

Group By:

Save Query | Load Query... | Query

Export to CSV | Export to XLSx

Client	Payment Account	Date	Document Icon	Document Info	Start Balance	Debit	Credit	End Balance
N/A	N/A	N/A			0.000 USD	721.008 USD	1 451.978 USD	-730.971 USD
orig1	Calls	01/13/2016 00:00:00 +0000	Charge	Charge	0.000 USD	106.572 USD	0.000 USD	106.572 USD
term1	Calls	01/14/2016 00:00:00 +0000	Charge	Charge	463.325 USD	0.000 USD	93.571 USD	369.754 USD
orig1	Calls	01/14/2016 00:00:00 +0000	Charge	Charge	106.572 USD	356.754 USD	0.000 USD	463.325 USD
orig1		01/14/2016 10:08:55 +0000	Payment 8	Payment 8 Paid with topup:201601-009852481	369.754 USD	0.000 USD	100.000 USD	269.754 USD

i Please note, that you can check an **actual date interval** of the report by clicking the icon **i** and it could be different from *the Interval* specified above if there is no date for the period.

! Please note, that when you export the file from the *Balance Report* in *Excel XLS/CSV* formats, values will be displayed in the report currency. The client and transaction currencies will not be shown in the exported file.

- [Why are there differences between reports?](#)

Resellers

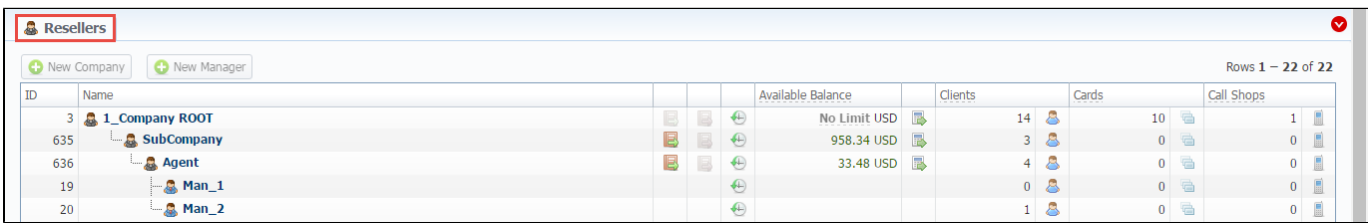
On this page

- [Resellers List](#)
- [Adding New Company](#)
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- [Adding New Manager](#)
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Resellers List

This section covers *Reseller/Manager* features and functions that are available and allow you to specify the information about your company or affiliate. Main window of this section contains the full list of *Resellers* and here you can create a *New Company/Reseller* or *Manager*.

Screenshot: *Resellers* section main window



The screenshot shows the 'Resellers' section main window. At the top, there are two buttons: 'New Company' and 'New Manager'. Below the buttons is a table with the following columns: ID, Name, Available Balance, Clients, Cards, and Call Shops. The table contains five rows of data, representing a hierarchy of resellers.

ID	Name	Available Balance	Clients	Cards	Call Shops
3	1_Company ROOT	No Limit USD	14	10	1
635	SubCompany	958.34 USD	3	0	0
636	Agent	33.48 USD	4	0	0
19	Man_1		0	0	0
20	Man_2		1	0	0

Adding New Company

To add a company, click the "New Company" button on the toolbar and a pop-up window with properties will appear.

Screenshot: *Adding new company*

Edit Reseller
Custom Fields
Rates Notifications
Reseller 1

SYSTEM INFORMATION

Name:

Parent:

Currency:

Status:

Client Template:

Tax Profile:

VoIP Gateways:

ORIGINATOR SETTINGS

Postpaid:

ORIG Rates:

ORIG Capacity:

CONTACT INFORMATION

E-mail:

Postal Address:

Tax ID:

Reg ID:

Bank Account:

TERMINATOR SETTINGS

TERM Rates:

TERM Capacity:

FRAUD PROTECTION

Notification frequency:

Skip digits:

INVOICING INFORMATION

Date:

Template:

No. Tpl:

Last No:

EMAIL RATES IMPORT SETTINGS

Host:

Port:

SURETAX SETTINGS


Client Number:

Validation Key:

COMPANY LOGO

No file chosen

Section	Fields Description	
System Information	General information	
	<ul style="list-style-type: none"> Name 	Here you can specify the name of one of your companies (or affiliates). This field is mandatory.
	<ul style="list-style-type: none"> Parent 	Select a parent for this Reseller
	<ul style="list-style-type: none"> Currency 	Preferred currency for rates and invoices
	<ul style="list-style-type: none"> Status 	Current status of the Reseller
	<ul style="list-style-type: none"> Client Template 	Template that will be used for all clients belonging to this Reseller or Manager by default
	<ul style="list-style-type: none"> Tax Profile 	<p>Select a tax profile, that will be used for this Reseller.</p> <p>You can specify a tax profile which will be reflected in invoices (refers to <i>Taxes Profiles</i> section).</p> <ul style="list-style-type: none"> SureTax is a tax levied on top of another tax. It allows to manage your compliance with tax law. This profile is used for further calculation in invoices. To get more details, check out the article "How to set SureTax profile?". <div style="border: 1px solid orange; padding: 5px; margin-top: 10px;"> <p> For proper usage of SureTax, the <i>Invoice Number</i> should contain only Latin and numeric characters. Max length is 40 symbols. <i>Dst</i> and <i>Src Numbers</i> should be in format <i>NPAN XXNNNN</i> (10 digits).</p> </div>

	<ul style="list-style-type: none"> • VoIP Gateways 	Select respective gateways that are allowed for this Reseller	
Originator Settings	Current Reseller's billing settings for incoming calls		
	<ul style="list-style-type: none"> • "Postpaid" check box 	Here you can set specific paid mode for a client. If postpaid mode not selected, this client's Balance + Credit value will be checked on RADIUS or SIP authorization, in other case client will have unlimited credit.	
	<ul style="list-style-type: none"> • Credit 	Additional field in the row of Postpaid check box. Credit limit allowed for client.	
	<ul style="list-style-type: none"> • ORIG Rates 	Rates for incoming calls from customers under current Reseller. Requires resellers billing mode enable	
	<ul style="list-style-type: none"> • Routing Plan 	Default routing plan for customers of this Reseller, if no other is specified in Client's profile	
	<ul style="list-style-type: none"> • ORIG Capacity 	Origination capacity of this Reseller for all clients that belong to him. Leave this field empty for unlimited capacity	
Terminator Settings	Current Reseller's billing settings for outgoing calls		
	<ul style="list-style-type: none"> • TERM Rates 	Rates for outgoing calls to providers under this Reseller (i.e the Reseller's rate by which the call is billing). Requires Resellers billing mode enable	
	<ul style="list-style-type: none"> • TERM Capacity 	Termination capacity of this Reseller for all clients that belong to him. Leave this field empty for unlimited capacity	
Invoicing Information	Current Reseller's invoicing settings		
	<ul style="list-style-type: none"> • Date 	Allows you to select how system sets invoicing date: <ul style="list-style-type: none"> • Real date – sets invoicing date to actual invoicing date • Last day – sets invoicing date to date of last day of invoicing period 	
	<ul style="list-style-type: none"> • Template 	Select an invoice template to use with this Reseller	
	<ul style="list-style-type: none"> • No Tpl 	Allows to define default format of invoice's name	
	<ul style="list-style-type: none"> • Last No 	Define last used invoice number here	
"Fraud Protection" check box	Enables/disables administrator notification in case of multiple simultaneous calls made to the same number from the current Reseller.		
	<div style="border: 1px solid yellow; padding: 5px;">  Please note that all notifications can be found in <i>System - Events Log</i> section. If you want to receive its on exact email, go to <i>System - Events Log - Configuration</i> section, here specify an email and tick the "A" check box (stands for Alerts) of "RADIUS: Fraud Protection" service, then click the "Update" button for saving changes. </div> <p>Here you need to specify the following:</p>		

	<ul style="list-style-type: none"> • Notification frequency 	Set minimum time in seconds between sent notifications (minimum interval should be greater or equal to 0 sec)	
	<ul style="list-style-type: none"> • Skip digits 	Define amount of the last number digits which will be ignored when determining a destination number. For instance, with one digit for ignoring, the numbers 123456 and 123457 will be considered as the same number	
Email Rates Import Settings	Settings used for automatic import of updated rates from emails		
	<ul style="list-style-type: none"> • Host 	Specify an email server. Note that it should support IMAP and SSL	
	<ul style="list-style-type: none"> • Port 	Define a port, by default the 993 port is set	
SureTax Settings	<p>SureTax profile settings. SureTax is third-party tax calculation engine. This tax calculation is based on the location of the customer's taxing jurisdiction. This profile is used for further calculation in invoices. To get more details, check out the article "How to set SureTax profile?".</p> <ul style="list-style-type: none"> • Client Number - unique number that identify an individual in the SureTax service. • Validation Key - unique validation key of the SureTax service. 		
Contact Information	Some additional information		
	<ul style="list-style-type: none"> • E-mail 	Company's e-mail (it is required to specify e-mail in order to receive notifications)	
	<ul style="list-style-type: none"> • Postal Address 	Company's postal address	
	<ul style="list-style-type: none"> • Tax ID 	An ID of tax paying entity	
	<ul style="list-style-type: none"> • Reg ID 	Company's registration ID	
	<ul style="list-style-type: none"> • Bank Account 	Company's bank account info	
Company Logo	Here you can add the file with company's logo. To delete the company logo, open the edit form of a respective Reseller with logo, then click the delete icon to remove an old logo.		



Please be aware, that changes of Resellers' settings will not be applied instantly. They will be automatically reloaded every 5 minutes.



Please note, that **Parent Reseller** has access to all information of his **Sub-Resellers** and also can assign **any routing plan and rate table** to his **Sub-Resellers**.

Adding New Manager

To add a manager, click the "New Manager" button and complete by supplying required information.

Screenshot: Adding new manager.

New Reseller

SYSTEM INFORMATION

Name:

Parent:

Status:

CONTACT INFORMATION

E-mail:

Postal Address:

Section	Fields Description	
System Information	General information about Manager	
	• Name	Here you can specify the name of Manager. This field is mandatory.
	• Parent	Select a parent for this Manager
	• Status	Current status of Manager
Contact Information	Some additional information	
	• E-mail	Manager's e-mail
	• Postal Address	Manager's postal address

Reseller Removal

To delete a *Reseller/Manager* from the system you need to **change the status** from *Active* to *Deleted* in *Reseller's Properties* window.

Screenshot: *Edit Reseller status*

Please note, that in fact *Reseller/Manager* will not be deleted fully, it will be put to *Archive*. To find it just choose *Archive Mode* in the right top under Resellers List. To delete a profile completely you need to click the "Full Delete" bottom.

Screenshot: Reseller Archive

ID	Name	Available Balance			
144	CUS_1	100.00 USD			
134	CUST1	0.00 USD	1		0
3	Demo Reseller 01	No Limit USD	16		100
6	Demo Reseller 02	10 000.00 USD	0		0
9	Demo SubReseller 02	No Limit USD	0		0
10	Demo Manager 02	No Limit USD	0		0
140	HUSNABI_CUST	0.00 USD	1		0

Custom Fields

Custom Field is used as custom variables: they can be added as Transaction via Extra Charges and then will be represented as readable text in invoice templates. To add new field follow next steps:

1. Click the "Add Custom Field" button.
2. Specify *Field Key* and *Title* for custom item: for example: "voip_phone_sell" as Key and "Sell of VoIP Phone" as common Title which will be visible for all clients. Please note, that the *Field Key* must contain word characters only.

Screenshot: Custom Field

Rates Notifications

Rates Notifications settings in *Resellers* section allows to create **default rate notification** for clients that belong to relative Reseller.

Screenshot: Reseller/Rates Notifications

You may find a description of all fields below.

Field	Description
Code / Name	Specify code / name of exporting file
Rate Group	Specify rate group in case of jurisdictional billing
Imported File	Select imported file
Changes	Select changes (<i>Decreased, Increased, Not changed, New</i>)
Confirmed	Select, confirmed your file or not
Rate	Specify price interval
Setup Fee	Specify setup fee interval
Min Time, sec	Specify minimal time interval of tarificated calls
Interval, sec	Specify tarification interval
Profile	Select time profile (<i>all time, business time, non-business time, weekends</i>)
Grace Time, sec	Specify grace time interval

Fill here next fields:

Field	Description
Date Format	Date format in your export file. Syntax is following: for example, if you put "%d-%m-%Y" here, your date will look like 25-05-2011
Code Deck	Select a code deck here to rewrite code names in export file if needed
Codes Output	Specify how codes should be displayed. There are few options
	<ul style="list-style-type: none"> Separate rows Each code is placed into single row Delimited list Codes are grouped by code name in a row, for example, 5510,5511,5512

	<ul style="list-style-type: none"> • Ranges list 	Codes are grouped by code name into ranges plus delimiter, for example, 5510-5512, 5515
Data Format	Specify output file format, XLS or CSV	
Fields Delimiter	Set delimiter for fields if you've chosen CSV	
"With headers row" check box	Include column names into the file	
"Codes from code deck" check box	Allows to additionally filter the export, by selecting only codes which are present in specified <i>Code Deck</i>	
Header text / Footer text	Allows you to additionally put some text into exported file as header and footer respectively	

Configuring Mail Templates

Also, there are different mail templates you can configure for your company:

Template Name	Description
Mail Template: Invoice	Is used when sending invoice to the customer
Mail Template: Payment Reminder Notification	Is used when sending payment notification to the customer
Mail Template: Low Balance Notification	Is used when sending low balance notification to the customer
Mail Template: Rates Notificator	Is used when sending rate changes notification to the customer
Mail Template: Factors Watcher	Is used when sending notification to the customer once adding Preset by Factors Watcher
Mail Template: Reports Watcher	Is used when sending reports by email

Screenshot: Reseller/ Mail Template:Factors Watcher form

MAIL TEMPLATE: FACTORS WATCHER

From: "{\$company['name']}" <{\$company['c_email']}>

BCC:

Subject: Factors watcher notification {\$company['name']}

Direction {\$direction} blocked by: {\$reason}

--

Autogenerated by JeraSoft VCS

Field	Description
From	Name of Company, e-mail of the Company
BCC	Here specify who will receive a blind copy of an email
Subject	Name of Company that is used for Factors Watcher notification
Direction {direction}	<i>Code</i> or <i>Code name</i> , this field fills in automatically by the system
Reason {reason}	Values specified in Factors Watcher settings (for example: calls_total >0).

To configure any of these templates, click on its name. Here presented templates configuration syntax used almost in all kinds of configured mails concerning Clients and Resellers data and configuration syntax which is used in foregoing list of mail templates.

Configuration Syntax

General Configuration Syntax Concerning Client Data

Templates Configuration Syntax	Description
--------------------------------	-------------

<code>#{client['status']}</code>	A client status: <ul style="list-style-type: none"> • active • deleted
<code>#{client['name']}</code>	A client name
<code>#{client['balance']}</code>	A client live balance
<code>#{client['balance_accountant']}</code>	A client fixed balance
<code>#{client['credit']}</code>	A client available credit
<code>#{client['c_company']}</code>	A client official company name
<code>#{client['c_address']}</code>	The post address of a client's company
<code>#{client['c_email']}</code>	The email of a client
<code>#{client['locale']}</code>	A client location
<code>#{client['id_currencies']}</code>	The currency ID used by a client
<code>#{client['tz']}</code>	The time zone of a client
<code>#{client['id_taxes_profiles']}</code>	The taxes profiles used by a client
<code>#{client['tax_id']}</code>	Customers tax ID of a clients' company
<code>#{client['reg_id']}</code>	The registration ID of a clients' company

General Configuration Syntax Concerning Company/Reseller Data

Templates Configuration Syntax	Description
<code>#{company['status']}</code>	A company/reseller status: <ul style="list-style-type: none"> • active • deleted
<code>#{company['balance']}</code>	A company/reseller current balance
<code>#{company['balance_accountant']}</code>	A company/reseller fixed balance
<code>#{company['credit']}</code>	A company/reseller available credit
<code>#{company['c_address']}</code>	The post address of a company
<code>#{company['c_email']}</code>	The email of a company
<code>#{company['locale']}</code>	A company location
<code>#{company['id_currencies']}</code>	A company currency ID
<code>#{company['tz']}</code>	A company time zone
<code>#{company['id_taxes_profiles']}</code>	A company/reseller taxes profiles
<code>#{company['name']}</code>	Name of a company
<code>#{company['tax_id']}</code>	Customers tax ID of a company
<code>#{company['reg_id']}</code>	The registration ID of a company

Configuration Syntax for Mail Template: Invoice and Payment Reminder Notification

Templates Configuration Syntax	Description
<code>#{invoice['c_dt']}</code>	Invoice date
<code>#{invoice['type']}</code>	Invoice type

<code>\${invoice['amount']}</code>	Invoice total sum
<code>\${invoice['period_start']}</code>	Invoice period start
<code>\${invoice['period_finish']}</code>	Invoice period end
<code>\${invoice['due_date']}</code>	Invoice due date
<code>\${invoice['no']}</code>	Invoice number
<code>\${invoice['descr']}</code>	Invoice comments
<code>\${invoice['tz']}</code>	Invoice time zone
<code>\${invoice['state']}</code>	Invoice state
<code>\${invoice['name']}</code>	Invoiced client name
<code>\${client['currency']}</code>	A client currency

Configuration Syntax for Mail Template: Low Balance Notification

Templates Configuration Syntax	Description
<code>\${client['balance_avail']}</code>	A client live balance + credit
<code>\${company['balance_avail']}</code>	A company/reseller live balance + credit
<code>\${client['currency']}</code>	A client currency
<code>\${client['alert_threshold']}</code>	Notification for a client of reached balance limit
<code>\${client['alert_athreshold']}</code>	Notification for an administrator of reached balance limit

Configuration Syntax for Mail Template: Rates Notificator

Templates Configuration Syntax	Description
<code>\${msg['rt_name']}</code>	Rate table name
<code>\${msg['lastedit_dt']}</code>	Data when Rate table was last time edited

Configuration Syntax for Mail Template: Reports Watcher

Templates Configuration Syntax	Description
<code>\${report["title"]}</code>	Head of report template
<code>\${report["interval"]}</code>	Actual report period of time
<code>\${report["title-full"]} = \${report["title"]} + \${report["interval"]}</code>	
<code>\${report["webUrl"]}</code>	URL to view report in the web portal
<code>\${report["id"]}</code>	ID of report template

Knowledge Base Articles

- [How to set up a functional capacity?](#)

Client Packages

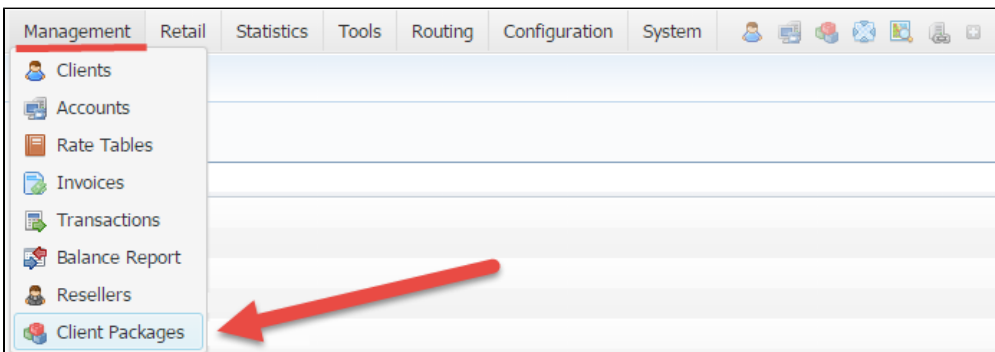
On this page

- [Client Packages Main Window](#)
- [To assign the package](#)
- [To add the package](#)

Client Packages Main Window

This section provides a possibility to see the full list of all packages, assign them to respective *Client/Account*. To access these settings, go to *Management section*.

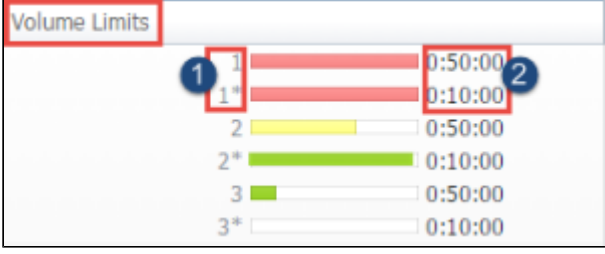
Screenshot: Management section/Client Packages











Screenshot: Client Packages list

Client	Account	Package	Volume Limits	Start Date	Expire Date	Timezone			
Balance_orig		Greece 30 5 USD free	30 5.00 USD	06/02/2016 00:00	07/02/2016 00:00	UTC			
Greece		Greece 30 10 minutes free	30 0:10:00	06/15/2016 11:30	07/15/2016 11:00	UTC			
Greece		Greece 30 5 USD free	30 5.00 USD	06/15/2016 12:09	07/15/2016 12:00	UTC			
New Client			373 * 1:40:00	06/20/2016 00:00	06/27/2016 00:00	UTC			
client-DID		RADIUS by Package	* 0:10:00	06/21/2016 15:00	06/28/2016 15:00	UTC			
Package		Global on Reseller		06/22/2016 14:00	06/23/2016 14:00	UTC			
New Client		DID		06/23/2016 00:00	06/25/2016 00:00	UTC			
Balance_orig				06/23/2016 13:00	06/25/2016 13:00	UTC			
client-DID		Money Credit	123 5.00 USD	06/23/2016 14:00	06/30/2016 14:00	UTC			

Column	Description
Client	Name of Client to whom package is assigned
Account	Name of Account to whom package is assigned Shows for whom package is assigned
Package	Name of assigned package

Volume Limits	<p>Shows, if respective package has some volume limits and time or money left</p> <ol style="list-style-type: none"> 1. On the left side of the bar it shows the <i>destinations, code or code names</i>. 2. On the right side it shows a <i>specified limit</i> (see screenshot below). <p>Screenshot: <i>Client Packages settings/ Volume Limits bar</i></p> 
Start Date	A date, when package was activated
Expire Date	A date, when package will be stopped if there will be no prolongations (due to client's balance, for example)
Timezone	The respective timezone

Icon	Description
	Marks package, that was successfully activated and will renew itself due to the package settings
	Marks package, that is new for current user and not activated yet
	Marks package, that is in the archive
	Click this icon to edit the "Deal End Date"
	Click this to insure that package will not be renewed, even if all requirements are met
	This icon allows to revert changes triggered by the previous icon until <i>Packages Manager</i> starts
	It allows to renew the package. Besides, we strongly recommend not to renew the package on the expiration date.
	Click this icon to delete the package

To assign the package

Click the **"Assign Package"** button and a new window with settings appears. Then fill the form according to your demands and click «Apply» button. You can assign any number of packages. They will be activated when *Package Manager* service runs, and if a customer has enough balance for activation+subscription fees.

Screenshot: *Client Packages form*

Client Packages

Client:

Account:

Package:

Deal Start Date:

Deal End Date:

Quantity:

Align to Payment Terms

Recalculate to Period

Column	Description
Client	Name of Client to whom package is assigned
Account	Name of Account to whom package is assigned Shows for whom package is assigned
Package	Name of assigned package
Deal Start Date	Package's limits and discounts are only effective after specified date
Deal End Date	Package's limits and discounts are disabled after specified date
Quantity	Number of packages to be assigned.
"Align to Payment Terms" check box	If enable, it takes client's assigned payment terms as date of package first reactivation
"Recalculate to Period" check box	<p>If enable, it recounts charge to next reactivation date.</p> <p>For example, if specified payment terms are 30/1, the following package is activated on 20th of the current month and you enable this option, only 10 days charge will be applied, and a package will be reactivated on 1st of the next month.</p>

Tip 1: you can also **assign packages to the Resellers** in this section.

Tip 2: It is possible to **assign a backdating package** in the **Client Packages**. In order to update the deal end date of a package you need to change it in the *Client Package* settings and then restart the *Package Manager*.

Please be aware that you should run the *Package Manager* several times until the current period of the package or its end date.

Please note that when you edit the *"Deal End Date"* field of already assigned package, transactions will not remain unchanged.

If you click the delete icon (i.e. **remove an archived package entirely**) in the *Client Packages* section you will delete a package with all transactions from the system. Also, this package will be removed from the *Client Info* form.

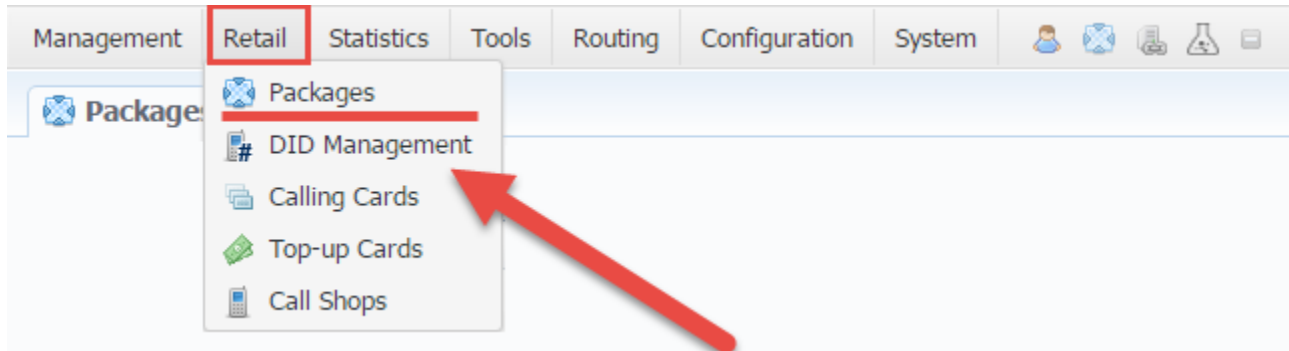
To delete the package completely you need to do the following:

- delete the package from the list in the Client Packages section
- open System/Task Scheduler section
- run Packages Manager
- return to the list of packages in the Client Packages section
- sort the list of packages by the status "archive"
- find a respective package and click the icon to delete completely from the system.

To add the package

You can add a new package in the *Retail section / Packages*. Click "**Add Package**" button and in the pop-up window fill the form with settings. Read more about it in the **Packages** article.

Screenshot: *Packages* section



When you change the **name of the package** in the *Retail* → *Packages*, it will automatically change it in the *Management* → *Client Packages*, even when this package is already assigned. The result is the following: you could not find and check changed package the system because there would be specified only an old name of the package in *Invoices* and *Transactions*.

We do not recommend to edit the name of already assigned package in the *Retail* → *Packages*.

Presets

On this page

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- [Adding Routing Presets](#)
- [Presets "Import" Feature](#)
 - [Step 1. Selecting File and Specifying Additional Parameters](#)
 - [Step 2. Recognizing The File](#)

Client Presets

This section provides the possibility to exclude (block) routes from routing scheme. Here, you can add and remove routing presets either for origination or termination routes.

Screenshot: Presets section

ID	Originator	Terminator	Code	Code Name	Creation Date	Expiry Date	Type	Notes
144	Client B	Balance_term Any	+231	Any	2016-05-12 11:53:49+00	2016-05-28 00:00:00+00	manual	
143	Client A	Balance_term Any	+1 242	Any	2016-05-12 11:51:24+00	2016-05-26 00:00:00+00	manual	
141	Client C	Balance_term Any	+33	Any	2016-05-12 11:44:13+00		manual	
139	Client A		*	Any	2016-05-10 12:58:54+00		auto	
138	Client B		*	Any	2016-05-10 12:56:08+00		manual	
137	Client A		*	Any	2016-05-10 12:55:16+00		manual	
136	Client C		*	Any	2016-05-10 12:54:52+00		manual	
135	Client A	Balance_term Any	38097	Any	2016-04-27 09:31:02+00		manual	



To quick open this section from the full list of the system, click the *Presets icon*.

Adding Routing Presets

To add a route click the "**+** New Preset" button and enter all required information:

Field Name	Field Description
Origination settings	<ul style="list-style-type: none"> • Orig Client - specify origClient for a current routing rule for whom this routing rule will work • Orig Account - indicate origination Client's account, that should be used in current routing rule
Termination settings	<ul style="list-style-type: none"> • Term Client - specify term Client for a current routing rule for whom this routing rule will work (i.e all calls coming from clients to that specified vendor will be denied to route) • Term Account - indicate term Client's account, that should be used in current routing rule
Code	<p>Specify a code of destination. The code is used for matching the rule. The longest code will be in usage.</p> <p>By default, it won't overwrite settings if the specified code is shorter than code which is used to rate the call. To set preset for all subcodes you can use * as wild card. For example, you have 38067 in your rate table and set preset for 380. Such settings won't include 38067, but 380* will do.</p>
Code Name	Indicate a code name or select it in this field
Expiry Date	Set an exact date for which the block should be active. If the field is empty it will never expire.
Action	<ul style="list-style-type: none"> • Deny - choose this action to block the current route selection • Allow - choose this action to accept particular route selection (for example: allow a route for particular account of the client)

Notes	Shows, when and how the rule was originally added. <i>Manual</i> rules added using this section, <i>auto</i> rules added by the Factors Watcher. Click arrow for additional information about the blocking factor that was used for the code or code name.
--------------	--

Screenshot: Add New Preset form

To **delete several particular presets**, you need to select them from the full list of presets and then click the **"Delete selected"** button on the toolbar.

Icon	Description
	Is used to identify allowed presets
	Is used to identify denied presets
	Is used to edit accounts
	Is used to see all presets for current client
	Is used to see the notes

Presets "Import" Feature

By clicking the **"Import Presets"** button on the toolbar you will get an access to mass import feature. This feature allows you to add new presets to already existing or to purge all existing presets and add new ones. You must use this feature in order to modify a huge amount of presets.

Whole mass import process can be logically divided into two steps.

Step 1. Selecting File and Specifying Additional Parameters

Open Import tab and select a file to import.

Uploaded *.csv file should contain at least 2 rows.

Screenshot: Presets "Import" feature main window

Presets

FILE PROCESS

Select file to import: No file chosen

Fields Delimiter:

IMPORT CONFIGURATION

On duplicate presets:

This step also allows you to choose some additional parameters, such as:

Field	Description
Delimiter	Set delimiter for CSV file: comma, semicolon or tab
Import configuration	Select an action if the duplicate presets will be found while an importing process <ul style="list-style-type: none"> • Update with latest value • Skip duplicate rows • Alert me about duplicates

After selecting a file and specifying all additional parameters click "Process>>" button.

Step 2. Recognizing The File

The system will recognize the file and display few first rows of it. If there's need, make changes to the recognition of data and click "Process>>" again.

Screenshot: Presets "Mass Import" feature. Step 2

Presets

DEFAULT VALUES

Expiry Date: Orig Client: Orig Account:

Code deck: Term Client: Term Account:

Action:

ROWS AND COLUMNS SELECT

			Skip
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

After you press "Process>>" for the last time, the system will start importing process. When the progress bar reaches 100%, your mass import is done!

You can import presets by *Code* and *Code Name* at the same time from one file.

To export all presets, you need to click the "**Export Presets**" on the toolbar.

Traffic Processing

This section allows performing a number translations. Here, you can add and remove rules for the traffic processing.

Screenshot: *Traffic Processing* section

ID	Type	Order	Applied to	Code	Code Name	Src Match	Src Replace	Dst Match	Dst Replace	Orig. Group	Rate Group		
40	DR	1	Client A	320		320501575784	320501575787	320501575784	320501575785	Group A	InterLATA-InterState		
39	Orig-Term	1	Client A	320		320501575784	320501575788	320501575784		Group B	IntraLATA-IntraState		
38	Term	1	Client B	320		320501575784		320501575784		Group A	IntraLATA-IntraState		
37	Orig	5	Client C	320		320501575784		320501575784		Group A	InterLATA-InterState		

To add Rules for Traffic Processing

To perform a number translation, click the "Add Rule" button and fill the following fields:

Field Name	Field Description
Type	Specifies, when current translation rule will be applied <ul style="list-style-type: none"> • ORIG - For calls originated from a client • TERM - For calls terminated to a client • ORIG-TERM - For both orig and term calls • DR - On Dynamic Routing, before sending calls to a terminator
VoIP Gateway	Select from the drop-down list a respective VoIP gateway for which rule is applied
Client Name	Select a respective client here
Account Name	Select a respective account here
Code	Specify a code of destination here (use * as wildcard)
Code Name	Or select a destination name in this field if applicable
Src Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will occur in respective settings in Src Replace field
Src Replace	Put a resulting action in this field, that will be performed, if translation process will take place
Dst Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will occur in respective settings in Dst Replace field
Dst Replace	Allows you to put matched calls into specified Origination Routing Group
Orig Group	Select a particular Orig group for the traffic matching this rule. This group could be used for applying extra rates.
Rate Group	Indicate a particular Rate group for the traffic matching this rule. Then, it will apply the rate under the specified Rate Group. This group could be used for applying additional custom rates.
Order	Sets rules ordering, first matched rule will stop further number translations.

These translation rules use regular expressions syntax. For example, if the number is 123#456, Match field is ^123#(.*) and Replace field is 789\1, then resulting number will be 789456.

Also, you can insert random number with fixed digit length using variable `$rnd(xxx-yyy)$`, where xxx - start number and yyy - end number of the range. For example `$rnd(050-950)$` will be replaced by a 3-digit random number from 50 to 950.



Tip: Please note that all routing related functions of this section are only available with **Routing Module** installed. Orig and Term number translations will work without **Routing Module**.

Retail Details

This chapter digs into the **retail functions of JeraSoft VoIP Carrier Suite**. Please note, that for all these functions are available if your JeraSoft VCS installation includes **the Retail Module**.

In addition to vast wholesale functionality, JeraSoft VCS offers the retail module described in below sections of this chapter. Each section describes an important aspect of retail-based VoIP business, and you may find among features the Calling Cards, Payment Gateways, Subscription Packages, Top-Up Cards and Call Shops. All of these options are grouped within the Retail section of your JeraSoft VCS solution.

For more detailed information please check the related subsections:

- [Calling Cards](#)
- [Top-up Cards](#)
- [Call Shops](#)
- [Packages](#)
- [DID Management](#)

Packages

On this page

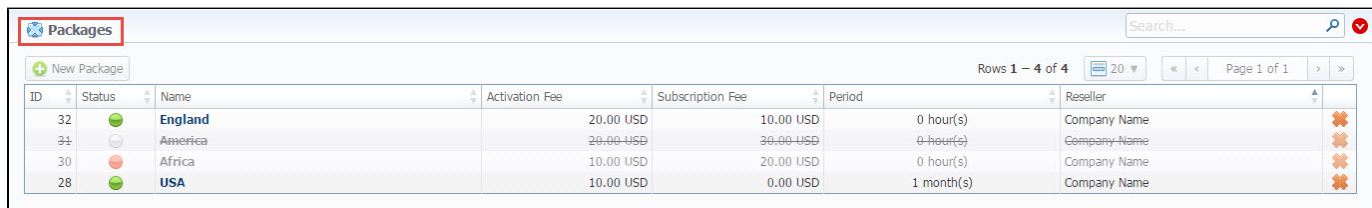
- [Packages List](#)
- [Adding New Package](#)
- [Knowledge Base Articles](#)





Packages List




The Packages section helps to add and manage any one-time or regular supplementary services that your company may provide in addition to VoIP. For example, you can create a package with rent of some equipment or create a free minutes promotional package.

The main window is a list that displays all packages that are currently available:

Screenshot: Packages section main window



ID	Status	Name	Activation Fee	Subscription Fee	Period	Reseller
32		England	20.00 USD	10.00 USD	0 hour(s)	Company Name
31		America	20.00 USD	20.00 USD	0 hour(s)	Company Name
30		Africa	10.00 USD	20.00 USD	0 hour(s)	Company Name
28		USA	10.00 USD	0.00 USD	1 month(s)	Company Name

Column	Description
ID	ID of current package
Status	Status of current package
	 Active Is in use by a customer
	 Disabled Not in usage
	 Archived Not used and not available anymore
Name	Current title of the package. Max length is 64 symbols.
Activation fee	Shows a fee that will be charged upon package activation
Subscription fee	Current fee that will be charged upon package renewal
Period	Shows the period of the package
Reseller	Current package's owner

Adding New Package

You can add new package by clicking the «New Package» button. New window with settings contains the following information:

Screenshot: Package properties

Packages

Name:

Reseller:

Currency:

Code Deck:

Status:

BILLING SETTINGS

Period:

Fees include taxes

Align to Payment Terms

Recalculate to Period

Charge on call

FEES +

Fee Type	Fee Name	Fee Note	Rate, USD
Activatio	Activation Fee	<input type="text"/>	0
Subscrip	Subscription F	<input type="text"/>	0

PACKAGE APPLICATION

Priority:

Deal Start Date:

Deal End Date:

Pre-activation: hours

DID LIMITS




Number of DID's:

Allowed DID groups:


VOLUME LIMITS +


DISCOUNTS +

Field Name	Description
Name	Name of your package
Reseller	Specify an owner for this package
Currency	Define a currency for this package
Code Deck	Specify Code Deck if you plan to create <i>limits</i> by using Code Names
Status	Current status of package (<i>Active, Disabled, Archive</i>)
Period	Specify a period for current package if it's renewable
"Fees include taxes" Check box	If enabled, taxes are included in package prices, if disabled – taxes will be calculated with respective Tax Profile of customer
"Align to payment Terms" Check box	Allows system to align period of package to customer's payment Terms, evening Package billing with actual invoicing for voice traffic
"Recalculate to Period" Check box	Allows recalculation of days up to Payment Terms period, if the package was activated somewhere in the middle


"Charge on call" Check box	If enable, package subscription fee will be applied when the first call within this package is made. Otherwise, package would be free.					
Fee Type	Select the type of a fee. There are two possible types: <ul style="list-style-type: none"> • Activation – a fee that will be charged upon package activation • Subscription – a fee that will be charged upon package renewal 					
Fee Name	Specify a name of a fee					
Fee Note	Here you may enter additional information about a fee					
Rate	Set a rate of a fee					
Priority	If there are multiple packages that satisfy a call, then a package with the highest priority will be used (i.e. priority 1 < priority 2). <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  Please note first that packages compare with free minutes or bonus money, then with priority. Only if there are two packages and both have the same amount of free minutes or bonus money, the system takes the package with priority 2, then with priority 1. </div>					
Deal Start Date	Package's limits and discounts are only effective after specified date					
Deal End Date	Package's limits and discounts are disabled after specified date					
Pre-activation	The period of time before the <i>Deal Start Date</i> when the package will be pre-activated. Also, a special pending charge will be created. Leave this field empty for no pre-activation. To include the charge of the package in the invoice for a previous month, define the number of hours you need. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px; background-color: #f8d7da;">  This option only works under the reactivation of the package. </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px; background-color: #fff3cd;">  Also, please note that if the "Charge on call" option is activated, you can't use the pre-activation for the package. </div>					
DID Limits	Specify how many DID's and from which group can be assigned to a customer with this package <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 20%; padding: 5px;"> <ul style="list-style-type: none"> • Number of DID's </td> <td style="padding: 5px;"> How many DID's can be assigned at the same time </td> </tr> <tr> <td style="padding: 5px;"> <ul style="list-style-type: none"> • All owed DID groups </td> <td style="padding: 5px;"> From which group DID's are picked for customer </td> </tr> </table>		<ul style="list-style-type: none"> • Number of DID's 	How many DID's can be assigned at the same time	<ul style="list-style-type: none"> • All owed DID groups 	From which group DID's are picked for customer
<ul style="list-style-type: none"> • Number of DID's 	How many DID's can be assigned at the same time					
<ul style="list-style-type: none"> • All owed DID groups 	From which group DID's are picked for customer					
Volume Limits	Here you can create promotional minute packets that will be included in the package. You can set both types (Money/Time) of Volume Limits within the same package <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 20%; padding: 5px;"> <ul style="list-style-type: none"> • Code </td> <td style="padding: 5px;"> Specify a code. Please note that package limits are working only for exact code, i.e. if a short code (for instance, '380') was added, package limits will work only for this code and won't automatically work for long codes like '38067'. To make volume limits work for long codes you must add * (for example, code 380*). </td> </tr> <tr> <td style="padding: 5px;"> <ul style="list-style-type: none"> • Code Name </td> <td style="padding: 5px;"> Specify a code name from selected Code Deck </td> </tr> </table>		<ul style="list-style-type: none"> • Code 	Specify a code. Please note that package limits are working only for exact code, i.e. if a short code (for instance, '380') was added, package limits will work only for this code and won't automatically work for long codes like '38067'. To make volume limits work for long codes you must add * (for example, code 380*).	<ul style="list-style-type: none"> • Code Name 	Specify a code name from selected Code Deck
<ul style="list-style-type: none"> • Code 	Specify a code. Please note that package limits are working only for exact code, i.e. if a short code (for instance, '380') was added, package limits will work only for this code and won't automatically work for long codes like '38067'. To make volume limits work for long codes you must add * (for example, code 380*).					
<ul style="list-style-type: none"> • Code Name 	Specify a code name from selected Code Deck					

	<ul style="list-style-type: none"> • Type 	Select a limitation type from the drop down list. You can set both types (Money/Time) within the same package
	<ul style="list-style-type: none"> • Limit 	Enter amount of free minutes or bonus money (depends on selected limitation type) that will be used in current promotion for specified code or code name
Discounts	A promotional discount of the package subscription fee. To set you need to specify the sequence number of the reactivation and indicate the discount value.	
	<ul style="list-style-type: none"> • Activation Count 	Specify the sequence number of the reactivation when the package will trigger the discount. For example: if the Activation Count is 2. The discount will be applied for the second package reactivation and further.
	<ul style="list-style-type: none"> • Discount 	The amount of subscription fee cut. Please specify the value with currency symbols (20 USD), not in percents

 Volume Limits will be recalculated according to payment terms if the period is specified and both check boxes "Align to payment terms" and "Recalculated to Period" are enabled.

 When two similar packages (for example, with the same destinations) are assigned to the client, the system takes the package with highest priority or earlier expiration date. Thus, only one package is being used for one established call. The second package will be applied right after the first one is fully used.

Information concerning Packages assignment to a certain client can be found here: [Client Packages](#).

 When you change the **name of the package** in the *Retail* → *Packages*, it will automatically change it in the *Management* → *Client Packages* in the *Package section*, even already assigned packages. The result is the following: you could not find and check changed package the system because there would be specified only an old name of the package in *Invoices* and *Transactions*.
We do not recommend to edit the name of already assigned package in the *Retail* → *Packages*.

Knowledge Base Articles

- [How to apply discounts without having to create a new package?](#)

DID Management

On this page

- [DID Management Section Main Window](#)
- [To edit DID Numbers](#)
- [To create DID Number](#)
- [To add multiple DID Numbers](#)
- [Mass Edit of DIDs](#)
- [DIDs Importing process](#)
- [Operators List Section](#)
- [DIDs History Section](#)

DID Management Section Main Window

This section allows to create the DID numbers, which may be later assigned to one of the packages and finally provided to a customer under Package terms (see screenshot below).

Screenshot: DID management section main window

ID	Status	DID	DID Group	Operator	Client	Reseller
7	Hold	1234	DID-1 / ASIA	1	Fox_terminator Fox_term_acc	AC
9	Reserved	34560000		1	---	AC
8	Active	5678000	DID-1 / ASIA	1	---	AC
3	In Stock	666		1	---	AC
5	Active	932979758	DID-1 / ASIA	Stas's cellphine	AMERICA ORIG/TERM CLIENT america_term_acc2	stest

Column	Description
ID	ID of current DID number
Status	<ul style="list-style-type: none"> • Active Is in use by a customer
	<ul style="list-style-type: none"> • In Stock DID is available for usage
	<ul style="list-style-type: none"> • Blocked Temporarily blocked
	<ul style="list-style-type: none"> • Reserved Not used DID, but not available for purchase yet
	<ul style="list-style-type: none"> • Hold Is on hold after usage, should become "In Stock" soon
	<ul style="list-style-type: none"> • Archived Not used and not available anymore
DID	Current DID number
DID Groups	Shows group, which current DID belongs to
Operator	Current DID's operator, an owner of a current DID number
Client	Shows client and account, which current DID belongs to

Reseller	Current DID's owner
-----------------	---------------------



Note!

Please note, that *DIDs without respective DID Group assigned* will automatically change the status into **"In Stock"** after 1 day being in status **"Hold"** by the system. The DIDs *with respective DID Group assigned* will change status from **"Hold"** to **"In Stock"** after a specified number of *h old days in DID Groups parameters*.



Also, when a package with already **assigned DID number** is not active, the respective DID number will be in **"Hold"** status and routing destination is unreachable. The DID is moving **"In Stock"** when the specified holding period is over.

To edit DID Numbers

By clicking on current DID number, the new window will pop up. Here you can edit all information about current DID, including the status, group, reseller, etc.

Screenshot: "Edit DID" window

The screenshot shows a window titled "DID Management" with the DID number 932979758. The fields are as follows:

- DID(s): 932979758
- Operator: 1
- DID Group: DID-1 / ASIA
- Status: Active
- Status Date: 02/12/2016 10:23:46 +0000
- Client: AMERICA ORIG/TERM CLIENT | america_term_acc2

Buttons for "OK" and "Cancel" are visible at the bottom.

To create DID Number

The whole process of creating DID number can be described in few steps:

1. Go to *Configuration – Groups* and create one or more *DID Groups* by clicking the *"New Group"* button in *"DID Groups"* tab;
2. Go back to *Retail – DID Management* and create one or more Operators (DID providers) by clicking the *"New Operator"* button in *"Operators List"* tab;
3. In *"DID Management"* section click the *"New DIDs"* button and add one or more DID numbers to previously created DID Group. Make sure that these DID's are put in *"in stock"* state. You can also use the *"Import DID's"* button;
4. Go to *Retail – Packages* and create a package, that will include DID Group and number of allowed DID's to be picked from it;
5. Assign respective Package to the customer, then go to DID's tab, where you will be allowed to pick one or more DID numbers.

This will effectively assign a DID number to one of the customer's accounts. Please note, that this functionality is very switch dependent, and additional development or testing may be required. Please contact JeraSoft Support team for help, if you have any doubts or questions.

To add multiple DID Numbers

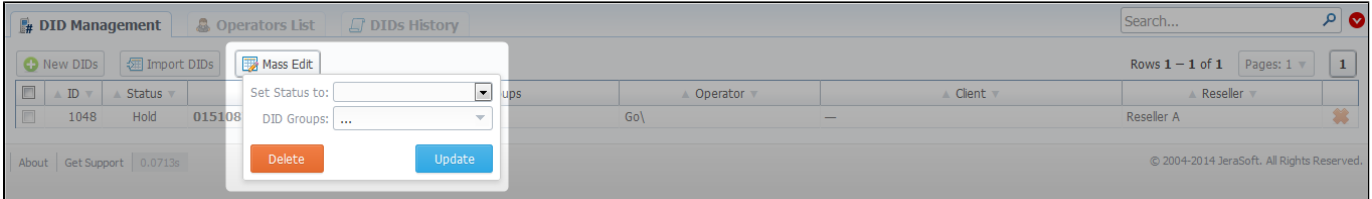
Also, you can **set the range of DID's numbers** and add multiple DIDs in one click.

Specify in the **"DID(s)"** field the range using the upper and lower numbers and the dash (-) to separate them, for example, *111-222*. Therefore, the system will create a range of DIDs from 111 to 222 (included).

Mass Edit of DIDs

On top of that, you can easily change the status for the group of selected DID numbers or delete them using **"Mass Edit" button** (Screenshot below). For changing the status you need to select DID numbers (for which the status should be changed), then click the *"Mass Edit"* button and in pop-up window specify the status from the drop-down list in respective *"Set Status to"* field, click the *"Update"* button for confirming the change. Also, using the *"Mass Edit"* button you can assign group of DID numbers to specific DID group, by selecting it from the drop-down list of *"DID Groups"* field. If you click the *"Delete"* button only selected DID numbers will be deleted.

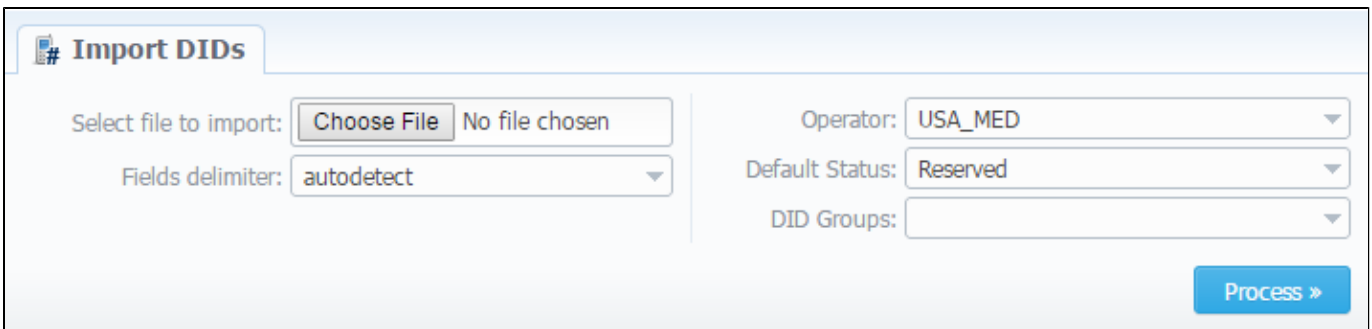
Screenshot: DID management "Mass Edit" window



DIDs Importing process

The process of DID numbers importing is pretty simple. Firstly, you should click the *"Import DID numbers"* button which can be found in the *DID Management section*. Secondly, in a pop-up window, you should fill in all needed fields (see screenshot below), that is select a file for importing, specify an operator, etc., and after that click the *"Process"* button. Please note that in the second step you can specify which group an imported list of DID numbers will belong to.

Screenshot: Importing DID numbers



Operators List Section



This section shows the list of operators who are owners of DID numbers, also it allows you to add a new operator to the list (see screenshot below).

To add a new operator according to your demands click the *"New Operator"* button and in the pop-up window and specify an operator name, then select a reseller for this operator, after click *"OK"*.

Screenshot: Operators List Main Window



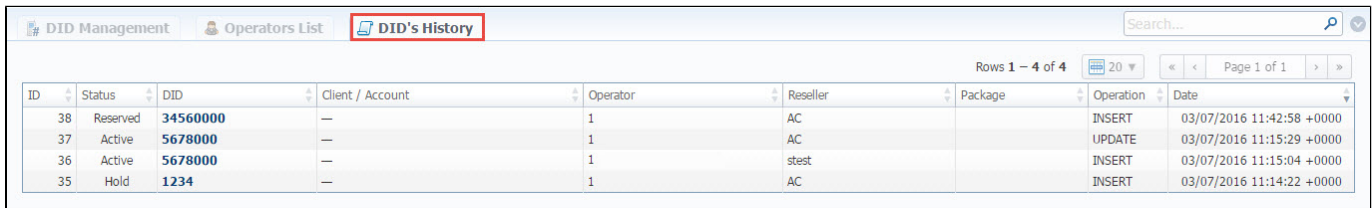
Column	Description
ID	ID of current DID number
Name	Operators' name
DID's count	The amount of DID numbers owned by the current operator
Reseller	Current operators' reseller

Icon	Description
	Click this icon to filter DID numbers of the current operator and show results in <i>DID Management</i> main window
	Click this icon to delete the operator

DIDs History Section

This section represents the information concerning DID numbers changes and updates.

Screenshot: *DIDs History* window



ID	Status	DID	Client / Account	Operator	Reseller	Package	Operation	Date
38	Reserved	34560000	—	1	AC		INSERT	03/07/2016 11:42:58 +0000
37	Active	5678000	—	1	AC		UPDATE	03/07/2016 11:15:29 +0000
36	Active	5678000	—	1	stest		INSERT	03/07/2016 11:15:04 +0000
35	Hold	1234	—	1	AC		INSERT	03/07/2016 11:14:22 +0000

Column	Description
ID	ID of current DID number
Status	Status of current DID number
	<ul style="list-style-type: none"> Active Is in use by a customer
	<ul style="list-style-type: none"> In Stock DID is available for usage
	<ul style="list-style-type: none"> Blocked Temporarily blocked
	<ul style="list-style-type: none"> Reserved Not used DID, but not available for purchase yet
	<ul style="list-style-type: none"> Hold Is on hold after usage, should become "In Stock" soon
<ul style="list-style-type: none"> Archived Not used and not available anymore	
DID	Current DID number
Client/Account	Shows client and account, which current DID belongs to
Operator	Current DID's operator
Reseller	Current DID's reseller
Package	Shows packages, which the current DID belongs to
Operation	The operation which was applied to the current DID
Date	Date of the made change

Calling Cards

On this page

- [Calling Cards List](#)
- [Creating Card Series](#)
- [Calling Card Series Properties](#)

Calling Cards List

This section represents built-in calling card generator that allows you to create or change card series for prepaid customers. Each generated card is considered a billing client, so a customer can perform calls, login to his control panel to browse statistics and other relevant information.

Screenshot: Calling Cards section main window

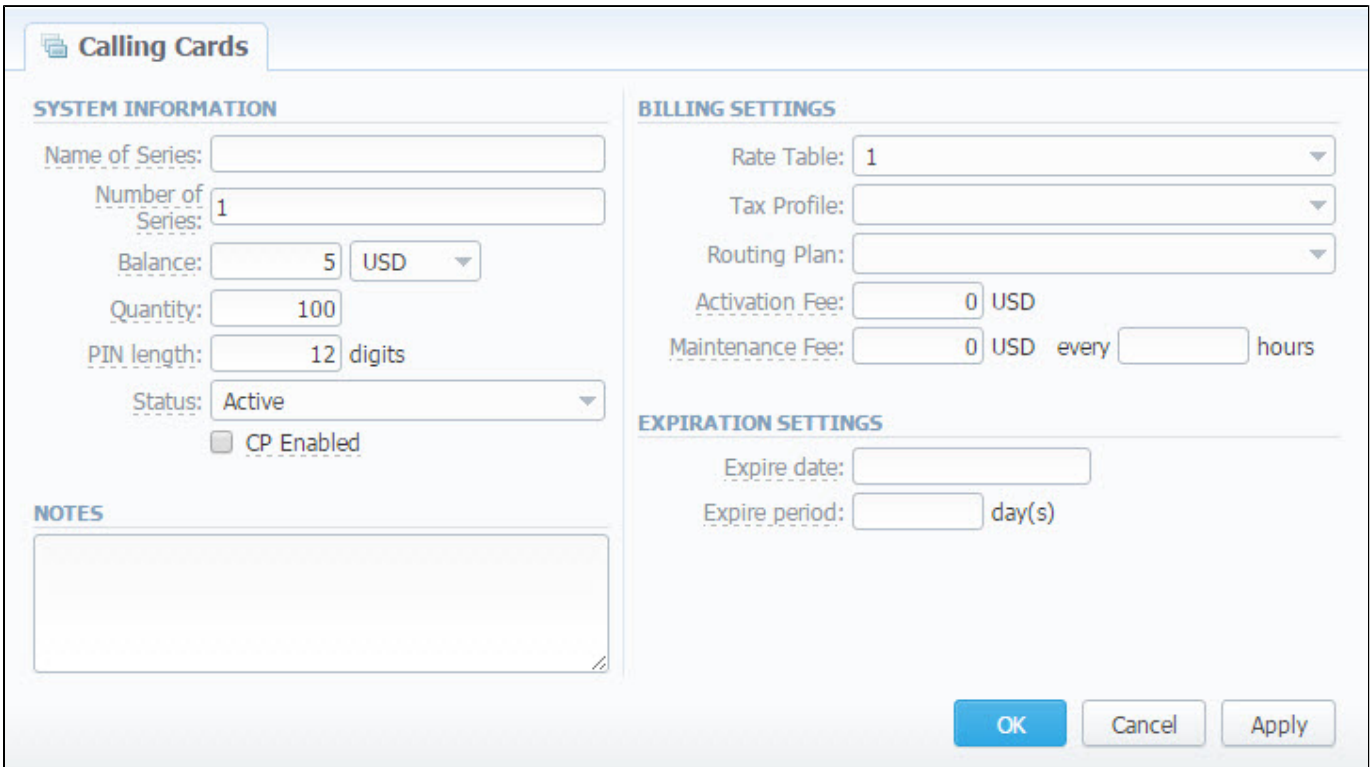


Status	Number of Series	Name of Series	Balance	Qty	Reseller	Rate Table	Act. Fee	Maint. Fee
●	1	1234	5.00 USD	100	stest	1	—	—
●	2	5678	5.00 USD	100	stest	1	5.00 USD	1.00 every 72 hours
●	4	91011	5.00 USD	100	stest	1	1.00 USD	2.00 every 24 hours

Creating Card Series

To create card series, click the «New Cards Series» button and a new window with settings will pop-up:

Screenshot: Generate card series window



Calling Cards

SYSTEM INFORMATION

Name of Series:

Number of Series:

Balance:

Quantity:

PIN length: digits

Status:

CP Enabled

NOTES

BILLING SETTINGS

Rate Table:

Tax Profile:

Routing Plan:

Activation Fee: USD

Maintenance Fee: USD every hours

EXPIRATION SETTINGS

Expire date:

Expire period: day(s)

Please fill out all required fields:

Field Name	Description
Name of Series	A name that describes current card series
Number of Series	A code of card series. This code will prepend serial number (only numeric, up to 100 000 000)
Balance	Cards balance value within current series
Quantity	Quantity of calling cards within current series
PIN length	Specify a desired PIN-code length for current calling card series (it can not be less than 8 digits)
Status	An initial status of created call cards within series. Can be changed later in card series settings
"CP Enabled" checkbox	Whether calling card users should be able to login to their control panels or not. If enabled, user can login to control panel by using card serial number as login and PIN-code as password
Tax Profile	Select a respective tax profile that will be used for billing settings
Routing Plan	Select a routing plan for current card series
Activation Fee	Enter activation fee in this field
Maintenance Fee	Charged fee each X day for all activated cards
Expire date	Current calling cards series will be expired on specified date
Expire period	When specified number of days pass, starting from activation date, current calling card series will be expired


Calling Card Series Properties


After you click the «OK» button, calling cards series will be created, and appear in the list of the section. To open series properties, click on the series name and you will have access to the following information:

- **Status** – status of a card within current series. There are 4 possible statuses: activated, pending, expired, used.
- **Number** – number of a card within current series;
- **Balance** – current balance of respective calling card;
- **PIN** – respective calling card PIN-number.

Screenshot: "Cards List" tab

Status	Number	Balance	PIN
Pending	1-007944598	5 USD	8316 3745 5124
Pending	1-007944599	5 USD	6844 5999 6845
Pending	1-007944600	5 USD	9543 3282 8485
Pending	1-007944601	5 USD	6857 4219 4551
Pending	1-007944602	5 USD	6094 3544 2853
Pending	1-007944603	5 USD	2919 5265 8669
Pending	1-007944604	5 USD	8303 7550 2602
Pending	1-007944605	5 USD	4343 5015 0020
Pending	1-007944606	5 USD	8553 1871 9531
Pending	1-007944607	5 USD	1996 7695 6074
Pending	1-007944608	5 USD	2503 5948 5007
Pending	1-007944609	5 USD	8676 9165 6558
Pending	1-007944610	5 USD	5532 2655 7381
Pending	1-007944611	5 USD	1262 6546 9271
Pending	1-007944612	5 USD	7450 9779 3334
Pending	1-007944613	5 USD	9868 5589 5158
Pending	1-007944614	5 USD	7101 4930 0829
Pending	1-007944615	5 USD	1033 4464 9713
Pending	1-007944616	5 USD	1037 3643 6812
Pending	1-007944617	5 USD	2373 1834 2554

1. Also, you can use the Quick Search toolbar to find a card, to open a search form click the down arrow  in the right-hand corner of the page.

2. Moreover, you can export whole card series to x/s* file by clicking the  «Download XLS» icon.

To change parameters previously entered while creating series, please open the **"Edit Cards Series"** tab.

Screenshot: **"Edit Cards List" tab**

Cards List **Edit Cards Series** #1 1234 [USD]

SYSTEM INFORMATION

Number of Series: 1
Balance: 5 USD
Quantity: 100
Name of Series: 1234
Status: Active
 CP Enabled

NOTES

BILLING SETTINGS

Rate Table: 1
Tax Profile:
Routing Plan:
Activation Fee: 0 USD
Maintenance Fee: 0 USD every [] hours

EXPIRATION SETTINGS

Expire date:
Expire period: [] day(s)

OK Cancel Apply



Note: Calling Cards feature works only via RADIUS-protocol, so to make use of it, you need to have RADIUS enabled. Also, you would like to use a specific platform, that is able to handle calling card series authorization, for example, Mera IP Centrex or Quintum Tenor DX (class 5 switch).

Top-up Cards

On this page

- [Top-up Cards List](#)
- [Creating New Series](#)
- [Mass Top-up Cards Edit](#)

Top-up Cards List

Top-up Cards section allows you to generate series of top-up cards for your customers, which they can use to recharge their balance. The main window of this section is displayed on screenshot:

Screenshot: Top-Up Cards section main window

Status	Serial Number	Amount	PIN Code	Reseller	Activated	Created on
	4-005561615	50.00 USD	3984 5829 5664	ASIA	—	03/09/2016 09:41:39 +0000
	4-005561617	50.00 USD	3160 2374 4968	ASIA	—	03/09/2016 09:41:39 +0000
	4-005561616	50.00 USD	8986 6153 4979	ASIA	—	03/09/2016 09:41:39 +0000
	4-005561614	50.00 USD	8301 1781 1736	ASIA	—	03/09/2016 09:41:39 +0000
	3-002715022	100.00 USD	6490 1310 3406	Company Name	—	03/09/2016 09:40:52 +0000
	3-002715023	100.00 USD	6031 0976 9143	Company Name	—	03/09/2016 09:40:52 +0000
	1-004811012	5.00 USD	5016 2986 1306	AC	—	01/08/2016 11:29:42 +0000

Creating New Series

To create new series, click the «Generate Top-Up Cards» button and in the pop-up window fill the following fields:

Screenshot: New Top-up Cards window

Top-up Cards

Amount: USD

Quantity:

Series:

PIN Length: digits

Reseller: Company Name




Expiry Date:

Field Name	Description
Amount	Cards balance value within series. This amount will be added to the customer's balance on activation.
Quantity	Quantity of cards within series

Series	A code identifier of card series. This code will prepend a serial number. For example, if the series is "101", the full card number will be "101-23423423".
PIN Length	Specify the desired PIN-code length for current calling card series (it can not be less than 8 digits)
Reseller	Defines the reseller that owns current calling card series
Expiry date	Current calling cards series will be expired on specified date

After top-up card series is created, your customers will be able to enter respective PINs in their control panel in *Payment Gateways* section, to recharge their balance (respective rights for users are required).

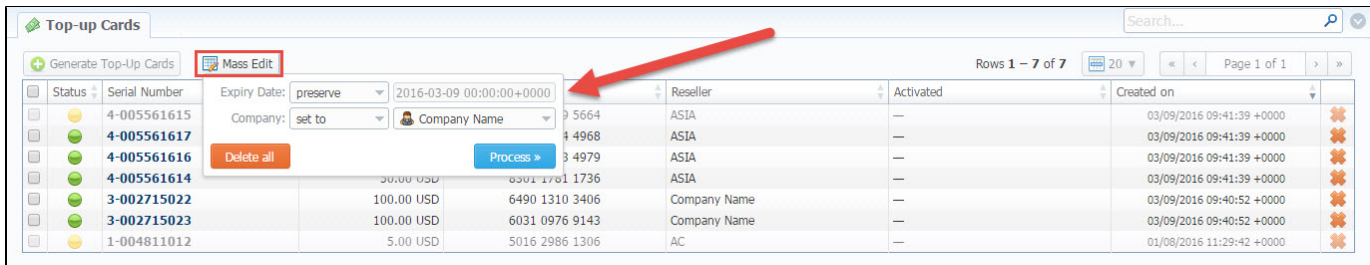
The status of top-up cards is displayed in *Top-Up Cards* main window in a form of the following icons:

Icon	Description
	Shows, that the current card is new
	Shows, that the current card is activated
	Shows, that the current card is expired

Mass Top-up Cards Edit

Also, you may delete cards or change some settings for already created top-up cards using **"Mass Edit" button**. In the following window you can specify expiration date of cards by changing state of respective *"Expiry Date"* field to *"set to"* and select data and time, and define a reseller who will be the owner of these cards by changing state of *"Company"* field to *"set to"* and select a reseller from drop-down list, then click the *"Process"* button and all changes will be applied. The *"Delete all"* button will wipe out all existing top-up cards.

Screenshot: *Top-up cards "Mass Edit" window*



Mass edit options	Description
Optional parameters	<ul style="list-style-type: none"> preserve - the default configuration that saves the rate not edited. Leave this parameter unchanged if required; set to - it allows to edit rates, for example, specify the same expiry date for all rates at once, regardless of previous configurations.
Expiry Date	Final date after which the rate will expire
Company	Name of one of your companies (or affiliates) that you can add in Reseller section

Call Shops

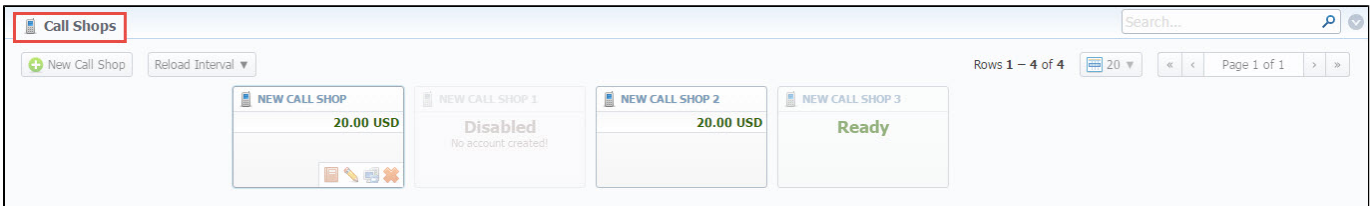
On this page

- [Call Shops List](#)
- [Creating New Call Shop](#)
 - [Steps to activate a call shop](#)
 - [The state of call shops](#)
- [To reload the interval](#)
- [Finalize/Reactivate Call Shop](#)

Call Shops List

Call Shops section allows you to create and manage call shop networks. Each call shop is a RADIUS-based customer. That's why for correct work of Call Shops module, RADIUS should be enabled. The main window is presented on screenshot:

Screenshot: Call Shops section main window



Creating New Call Shop

To create new call shop, click the «New Call Shop» button and fill the following details in the pop-up window:

Screenshot: Creating new call shop / Clients form


Field Name	Description
Name	Enter name for call shop
Reseller	Select a reseller that will be owner of this call shop
Currency	Specify preferred currency
Timezone	Choose preferred timezone
Status	Select a status for this call shop: <ul style="list-style-type: none"> • active • stop • deleted

Allowed Credit	Specify credit value here
Rate Table	Choose a rate table this call shop will be using
Tax Profile	Specify a Tax Profile this call shop will be using
Routing Plan	Select a routing plan, if you wish to use dynamic routing for this call shop
Capacity	You can limit origination capacity for this call shop in this field

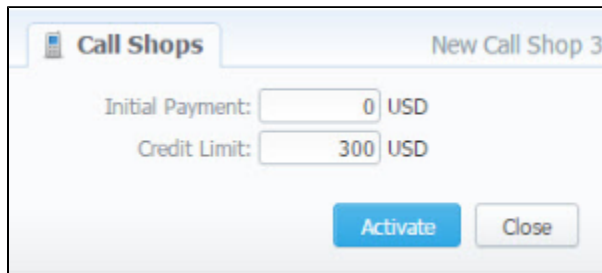
When all information is entered, click «OK» and call shop will appear on the list.

Steps to activate a call shop

When a call shop is already created you need to activate it by following these steps:

1. Click the "Edit"  icon on the respective Call Shop sub-panel and go to *Accounts* tab. Here, create a call shop's account in the same way as you did for your generic clients.
2. Return to the "Call Shop" section and click on the name of respective call shop.
3. Then fill the respective form (see screenshot below) and click the "Activate" button.

Screenshot: Call shop settings



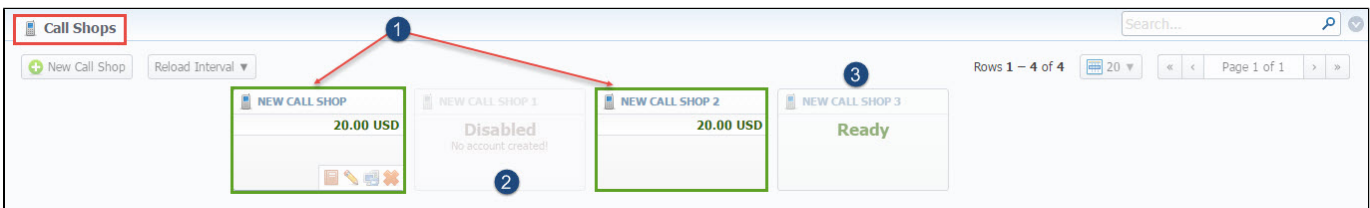
After that is done, call shop is ready to be used.

The state of call shops

Call Shops while you create them have 3 states. You can find the examples on the screenshot below.


1. **Activated** - the call shop is in usage. All steps described above are reproduced properly.
2. **Ready** - the call shop is ready for usage, but not activated. You need to activate it.
3. **Disabled** - the call shop is not enabled, check if a respective account is created and rate table is specified.



Screenshot: Call Shops section main window



To reload the interval

Also, you may **set an interval** for *Call Shops list reloading*. To do this, click the "**Reload Interval**" button in the toolbar and select the value from the dropdown list.

 Please note, that **calculator** should be in **real time mode** for correct *Call Shops* work.

Use the **Quick Search** toolbar  at the upper right corner of the page for fast investigation in this section. This tool allows to limit the search results for higher working efficiency. For example, to find call shops belonging to a certain *Reseller* or having *Active status*. To open this form click on the down arrow .

Finalize/Reactivate Call Shop

According to your demands, you can change an active period of the call shop.

Therefore, you may finish the call shop activities by clicking the **"Finalise"** button. Or you can activate once again the same call shop when it's over by clicking the **"Reactivate"** button on the toolbar.

To open the window with respective settings, click on the name of the call shop when it's already activated.

Screenshot: Call Shop settings

The screenshot displays a software interface for managing call shops. The window title is "New Call Shop 2". The main header is "Call Shops". The interface is divided into two main sections. The left section, titled "CURRENT SESSION", displays the following information: Duration: 0:00:00, Cost: 0.00 USD, Balance: 20.00 USD, and Credit Limit: 120.00 USD. The right section, titled "CURRENT SESSION CALLS: 0", contains a message box with an information icon and the text "No calls were made in this session". At the bottom of the window, there are four buttons: "Finalize", "Reactivate", "Print Bill", and "Close".

Also, you can print the bill of the following call shop by using the **"Print Bill"** button. If no option is required, you can close the window by clicking the **"Close"** button.

Statistics

This chapter of our Guide is dedicated to **establish statistics through VCS**, for example, to monitor customer's activities, to form different reports, etc. For more details please check the related sections:

- [Dashboard](#)
- [Summary Report \(x\)](#)
- [Orig-Term Report](#)
- [Profit Report](#)
- [LCR Lists](#)
- [CDRs List](#)
- [Mismatches Report](#)
- [Calls Rerating](#)
- [Reports Templates](#)
- [Archive Management](#)

Dashboard

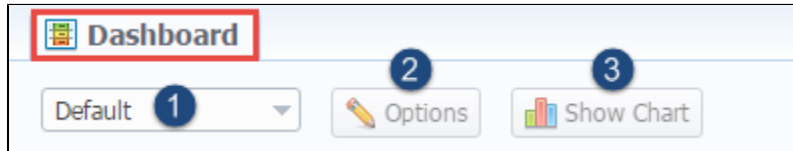
Dashboard is the customizable section with charts that makes the most relevant report data available on one screen.

It allows you to monitor your customer's activities in real-time, by providing visual charts on some most crucial information. Here you can find all charts that were created in the **Summary Report**, **Orig-Term Report** and **Active Calls** sections and exported to the **Dashboard**.

To know more about charts visit our Knowledge Base and look through the article "[How to create a statistic chart?](#)".

To start work with this section, please use the quick access toolbar (see the screenshot below):

Screenshot: Dashboard toolbar



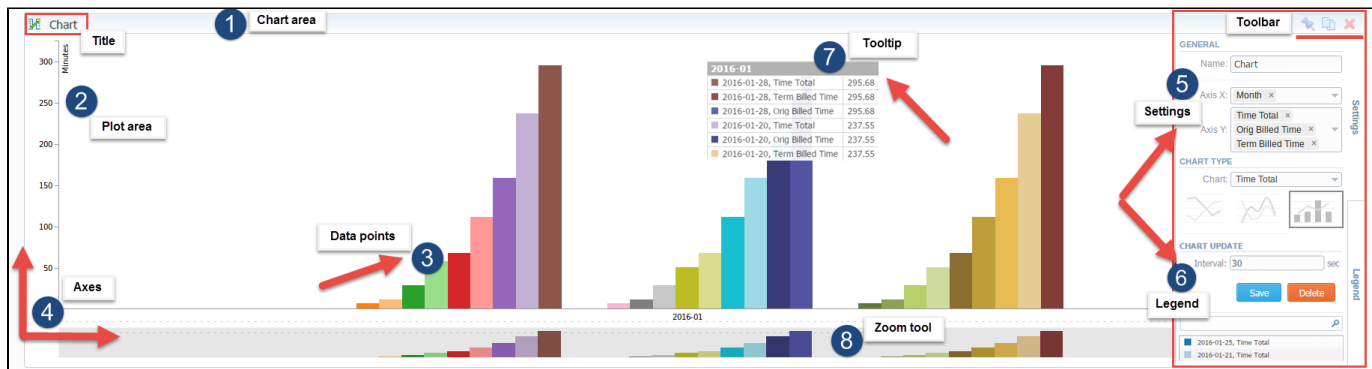
- Here you can **browse dashboard space**. You can have several dashboards. Click on the field and select a relevant *Dashboard* (for example, *Default*) from the drop-down list.
- To view the advanced settings click the **"Options"** button on the toolbar.
 - You can **change the name** of the respective dashboard by typing the text in the **"Dashboard name"** field, click **"Save"** and reload the page.
 - To **copy the dashboard**, click **"Copy"** and reload the page. Then you check the list of available dashboards.
 - Also, you can **remove any dashboard** by clicking the **"Delete"** button.
- To add a relevant chart to the dashboard, click the **"Show Chart"** button. Then choose the category of the chart (i.e. *Summary report /Orig-Term report/ Active Calls*) and select the respective chart from the drop-down list. You could add several charts and use the vertical scrolling to browse the space.

i Please note, the **Resellers and admins** have its own dashboards. The created dashboards while logged in the system as respective Reseller will be visible only for this Reseller.

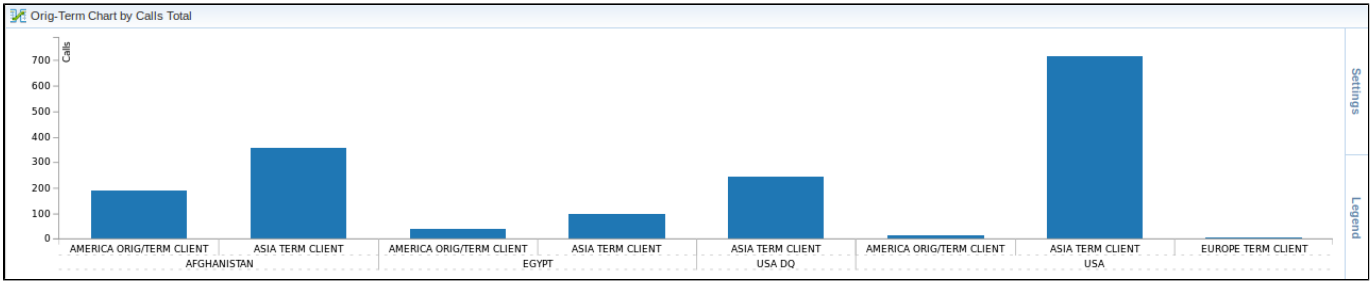
✓ Please note that you can **plot in the chart only existing statistics** in the report. It doesn't show time periods where there is no data. You can check an actual date interval by clicking the **Info icon** **i** and it could be different from the specified interval if there is no date for the period.

! When you choose the **Time parameters for the Axis X** (i.e. Year, Month, Date, Time) and there is only one period, the **line chart** will not display the data. For example, if you choose the Month on Axis X and the statistics is only presented for January, the **line chart** will be empty in this case.

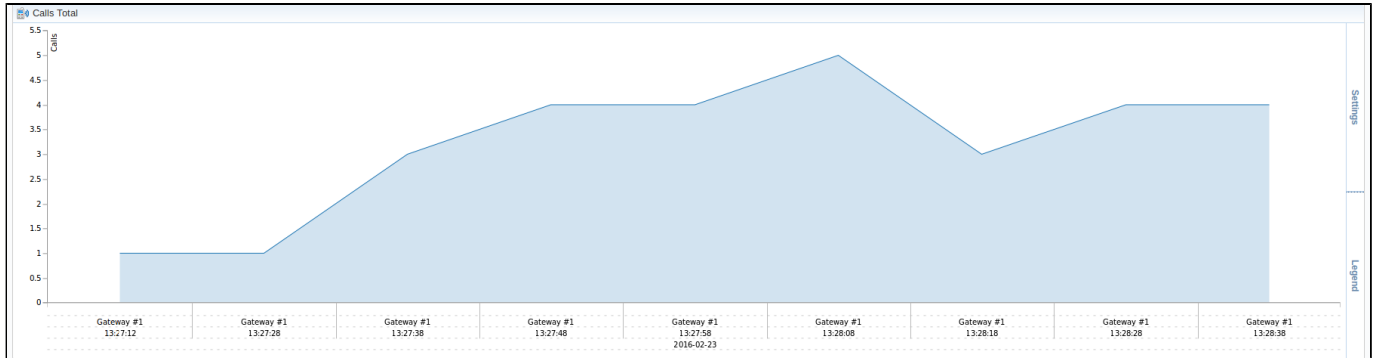
Screenshot: General example of chart



Screenshot: Orig-Term chart



Screenshot: Active calls chart



Knowledge Base Articles

- [Why there are no active sessions?](#)
- [Why it is impossible to use Code and Code Name filters in Dashboard section?](#)
- [Why Dashboard doesn't show statistics?](#)

Summary Report

On this page

- [Summary Report Query Form](#)
- [To create new report](#)
- [Simple scheme: how to generate a summary report](#)
- [To create query template](#)
- [Summary Report toolbar: export, chart.](#)
- [Side-by-side report](#)
- [Knowledge Base Articles](#)

Summary Report Query Form

This section allows you to generate a summary statistical report. Here you can create a report based on an existing template or generate a new one. Also, you can get the information sorted by date, clients and calls, even by the VoIP group.

Screenshot: Summary Report query form

To create new report

In order to create a statistic report go to the **Management** and open the **Summary Report** section.

Then you need to fill out the form with next parameters:

Section	Field Description
Filters	Filters that will be used for generating respective reports. Click plus sign next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking the sign to delete.
	Period 1 Specify the first interval for the report. Please note, that the "Period" field is mandatory.
	Period 2 Accessible when you enable the "Compare Period" option by clicking the plus sign next to the "Period". Specify the second interval for the report.
	Group By Select a grouping option, here you can choose and swap columns, change its order. There are following accessible options to group the data in reports: <ul style="list-style-type: none"> • Time: Year, Month, Date, Time. • Clients: Client Type/ Client/ Account/ Cards Serial/ Owner/ Package Name. • Calls: Code/Code Name/Currency/Rate/Extra Rate/Call Origin/ Disconnect Code/ VoIP Gateway. • Extras: VoIP Group. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> Please note, the "Group By" field is mandatory, it couldn't be empty in order to generate the report. It's intended to simply grouping option, the system groups data in specified columns. </div> <div style="border: 1px solid #f00; padding: 5px; margin-top: 10px;"> Please note, that if there is the Client or CC serial specified, it is not possible to group by default anymore. </div>
Additional Filters	

There are following accessible additional filters:

- **By clients:** Client Type, Client, Account, Client Group, Cards Serial, Package.
- **By calls:** Code, Code Name, Cost Total, Call Origin, Disconnect Code, VoIP Gateway.
- **Extras:** Owner/Time Total/ Calls Total/ Calls Not Zero/ ASR Current/ ACD Current.


Screenshot: Summary Report form/ Filters

FILTERS +		
Clients	Calls	Extras
Client Type	Code	Owner
Client	Code Name	Time Total
Account	Cost Total	Calls Total
Client Group	Call Origin	Calls Not Zero
Cards Serial	Disconnect Code	ASR Current
Package	VoIP Gateway	ACD Current

Client Type	Select a client's type for report (<i>Client, Reseller, Calling card or Call shop</i>)
Client	Define a client for the report
Account	Enter an account for the report
Client group	Define a client's group
Cards Serial	Indicate cards serial for the report
Package	Enter a package for the report
Code	Specify a code of needed destination
Code Name	Specify a code name of a desired destination
Cost Total	Enter the range of total call cost
Call Origin	Indicate call origination/termination
Disconnect Code	Define a disconnect code as a filtering parameter
VoIP Gateway	Specify a VoIP host as filtering criteria
Owner	Indicate the owner
Time Total	Enter the range of total calls duration in minutes
Calls Total	Enter the range of total calls
Calls Not Zero	Define the range of calls, that have duration equal to or more than 1 second
ASR Current	Specify the range of "ASR Cur" for calls you would like to display
ACD Current	Specify the range of "ACD Cur" for calls you would like to display

Output

This form contains settings of the output data of the report.

Click plus sign  near the "**Columns**" and select columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report

There are following columns to add at the report:

Columns for main period:

Average Rate, Cost Total, Calls Not Zero, Calls Success, Calls Busy, Calls No Channel, Calls Error, ASR Std, ASR Cur, ACD Std, ACD Cur, SCD Avg, CDRs List, Time Total, Time Billed, Time Package, PDD Avg, SCD Avg.



Columns for comparative period:

Cost Total, Time Total, Time Billed, Time Package, Cost Total, Calls Not Zero, Calls Success, Calls Busy, Calls No Channel, Calls Error, Average Rate, CDRs list, ASR Std, ASR Cur, ACD Std, ACD Cur, PDD Avg, SCD Avg. And it's possible to choose each parameter expressed as percentage.

Rate	<p><i>The call rate</i></p> <p>Avg. Rate - an average call rate that is used</p>
Cost	<p><i>The cost of the call</i></p> <p>Cost Total - Full price of calls</p>
Time	<p><i>The time of the call</i></p> <ul style="list-style-type: none"> • Time Total- the whole time of the calls in minutes • Time Billed- the whole billed time • Time Package- the time within respective package
Calls	<p><i>Quantity of calls in database</i></p> <ul style="list-style-type: none"> • Calls Total- Entire quantity of calls • Calls Not Zero - Quantity of calls, that have a duration equal to or more than 1 second • Calls Success - Quantity of calls, that have a duration equal to or more than 1 second and successful end code, calls with Q.931, disconnect cause 16 or 31 • Calls Busy - "Busy" calls quantity • Calls No Channel - No circuit / channel available • Calls Error - Quantity of declined calls
Statistics	<p>ASR - <i>Average successful rate (successful calls percentage)</i></p> <ul style="list-style-type: none"> • Std - Number of calls with status "success" divided by the total number of calls minus all calls with "no channel available" status • Cur - Number of calls with duration > 0 divided by total number of calls <p>ACD, min - <i>Average call duration</i></p> <ul style="list-style-type: none"> • Std - Sum of all call duration divided by number of calls with status "success" • Cur - Sum of all call duration divided by number of calls with duration > 0 <p>PDD Avg - <i>Average post dial delay</i></p> <p>SCD Avg - <i>Average session connect delay</i></p>
Extras	<p>CDR's List - <i>list of detailed calls statistics</i></p>

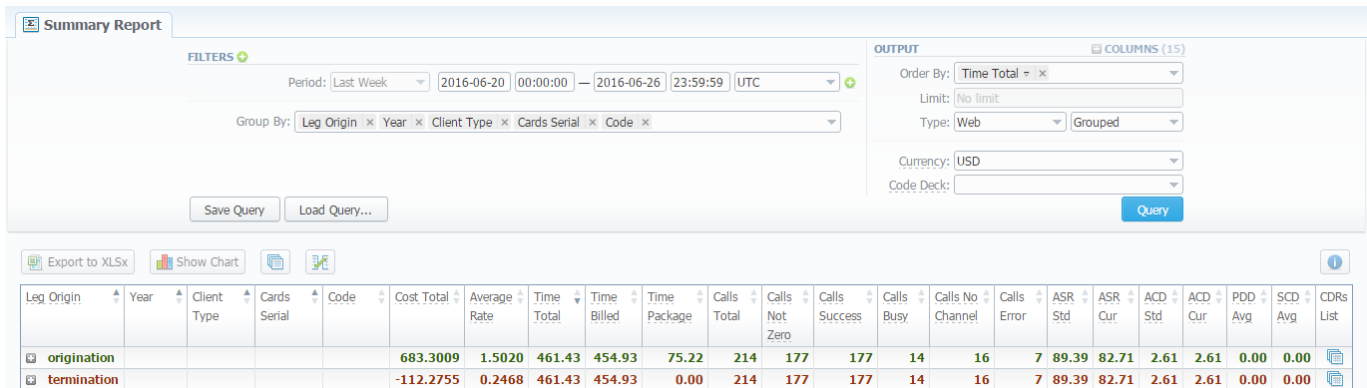
Other output settings

Order By Select parameters to sort already grouped data in columns. Here you can sort data from highest to lowest values (or vice versa) and select different values.

Type	<p>Choose a format of the report from a drop-down list: <i>Web/CSV/Excel XLS/Excel XLSx</i>.</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web</i> formats, it doesn't work with <i>CSV</i>.</p> </div> <p>Also, select next to the "Type" field a look of table view:</p> <ul style="list-style-type: none"> • <i>Plain</i> - a simple table view • <i>Grouped</i> - a table view with grouped data and possibility to collapse it
Limit	Determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen parameter. It is available only for plain type of the report.
Send to	<p>You can send generated reports via e-mail.</p> <p>For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails.</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0; background-color: #fff9c4;"> <p> This feature is available only for <i>CSV/Excel XLS/Excel XLSx</i> formats of the report, it doesn't work with <i>Web</i>.</p> </div>
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.
Code Deck	Select a code deck from a drop-down list. All codes in the following report will be presented according to the specified code deck.




After selecting all needed parameters, click "Query" button and the system will generate a report:


Screenshot: Summary Report window




The screenshot shows the 'Summary Report' interface. On the left, there are 'FILTERS' for 'Period' (Last Week, 2016-06-20 to 2016-06-26, 00:00:00 to 23:59:59 UTC) and 'Group By' (Leg Origin, Year, Client Type, Cards Serial, Code). On the right, 'OUTPUT' settings include 'Order By' (Time Total), 'Limit' (No limit), 'Type' (Web), and 'Grouped' view. A 'Query' button is at the bottom right. Below the filters are 'Export to XLSx', 'Show Chart', and 'Save Query' buttons. The main area displays a table with columns for various metrics and two rows of data: 'origination' and 'termination'.

Leg Origin	Year	Client Type	Cards Serial	Code	Cost Total	Average Rate	Time Total	Time Billed	Time Package	Calls Total	Calls Not Zero	Calls Success	Calls Busy	Calls No Channel	Calls Error	ASR Std	ASR Cur	ACD Std	ACD Cur	PDD Avg	SCD Avg	CDRs List
origination					683.3009	1.5020	461.43	454.93	75.22	214	177	177	14	16	7	89.39	82.71	2.61	2.61	0.00	0.00	
termination					-112.2755	0.2468	461.43	454.93	0.00	214	177	177	14	16	7	89.39	82.71	2.61	2.61	0.00	0.00	

 If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the  plus or  minus signs.

To expand all data in the report, please press Ctrl + the  icon.


 Please note, the system shows rounded values in the reports. But while calculating the system takes an exact value. Hence, the procedure of the rounding is following:


- system rounds currency values according to the settings of a respective currency;
- the parameters of the time are rounded to the nearest hundredth. For example, 4.8763 to 4.88;
- and others are rounded to the nearest ten thousandth. For example, 3.879256 to 3.8793.

Simple scheme: how to generate a summary report

In order to create a simple summary report you need to:

- Choose respective **"Filters"** for the report.
- Enter the interval.
- Select some parameters in the **"Group By"** field, for example, *Currency, Leg Origin*.
- Then choose **"Columns"** in the Output form, for example, *Average Rate, ASR Std, ASR Cur, ACD Std, ACD Cur, Calls Total*.
- Leave **"Type"** *Web/Grouped* settings by default.
- Specify the currency and choose the code deck (if applicable).
- Click the **"Query"** button.


 If you want to **sort already grouped data** in columns, select respective parameters in **"Order By"** . Also, you can sort from highest to lowest values (or vice versa).

 Please note, the **"Order By"** option is active when the **"Type"** of the Output form is **Plain**. When it is **Grouped**, the data is only sorting by values specified in the **"Group By"** field.

To create query template

Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Template form

Section	Description
Summary report	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a Reseller for the report template
	Visibility It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> • Public - available for users according to the settings of the "Reseller" field; • Private - accessible strictly for creator.
Watch	This tool allows to generate reports at the appropriate time and send results to the list of e-mails
	 Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i> .
	Recipients Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of a week to automatically generate a report. For example, you can run a report only on Monday or each day of week
Report Query	Here you need to specify filters that will be used for generating correct report and choose the output type to view the report

To load already existed templates while generating statistic reports click **"Load Query"** button in the *Summary Report* section.

Screenshot: Summary Report form

The screenshot shows the 'Summary Report' interface. On the left, there are 'FILTERS' with options for 'Period 1' (Last Week, 2016-06-20 00:00:00 - 2016-06-26 23:59:59 UTC) and 'Compare Period 2' (This Month, 2016-06-01 00:00:00 - 2016-06-27 23:59:59). Below these is a 'Group By' dropdown. On the right, the 'OUTPUT' section includes 'Order By' (Time Total), 'Limit' (No limit), 'Type' (Web, Grouped), 'Currency' (USD), and 'Code Deck'. At the bottom left, there are 'Save Query' and 'Load Query...' buttons. A red arrow points to the 'Load Query...' button. At the bottom right, there is a 'Query' button.

Summary Report toolbar: export, chart.

You can export data to a CSV and XLSx file which contains only currently presented data, no automatic request to update data while exporting. Also, it is possible to create charts for easily illustrating a crucial information. And you can generate a report using the same criteria in the *Orig-Term report* and the *DRs list* sections.

1. To download a report in .csv, click the **"Export to CSV"** button on the toolbar.

i Please note, this button will be visible only when the **"Type"** of the output is **"Plain"**. For the **"Grouped"** output type it is not available.

2. To download a .xlsx file, click the **"Export to XLSx"** button on the toolbar.

3. To create a visual chart, click the **"Show Chart"** button on the toolbar. There is more information available on this topic in the article **"How to create a statistic chart?"** at our Knowledge Base.

4. You can generate a detailed report using the same criteria in the CDRs list by clicking the **CDRs list icon** on the toolbar.

5. And it is possible to generate a report using the same criteria in the Orig-Term report by clicking the **Orig-Term icon** on the toolbar.

6. You can check an **actual date interval** of the report by clicking the **Info icon** and it could be different from the *Interval* specified above if there is no date for the period.


Screenshot: Summary Report section

The screenshot shows the 'Summary Report' interface with a data table. The toolbar at the top has buttons for 'Export to CSV', 'Export to XLSx', 'Show Chart', 'CDRs list', 'Orig-Term', and 'Info'. Red arrows point to these buttons. The data table below has columns for Call Origin, Year, Client Type, Cards Serial, Code, Cost Total, Time Total, Time Billed, Average Rate, CDRs List, Time Package, Calls Total, Calls Not Zero, Calls Success, Calls Busy, Calls No Channel, Calls Error, ASR Std, ASR Cur, ACD Std, ACD Cur, PDD Avg, and SCD Avg. A row is highlighted with 'mismatched' in the Code column.

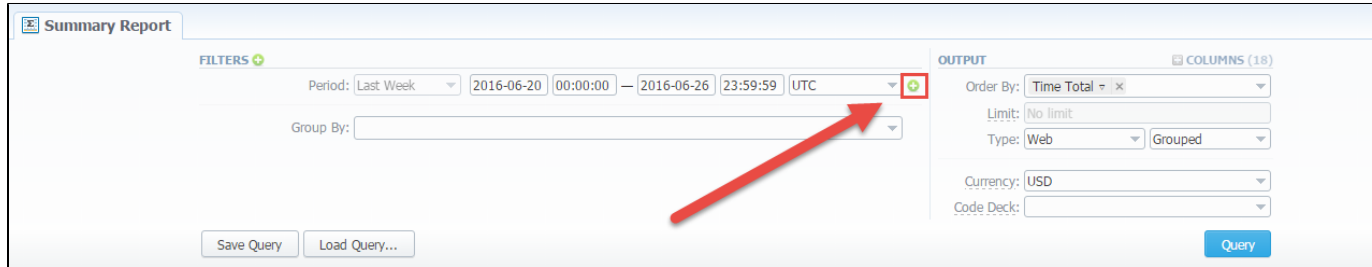
Call Origin	Year	Client Type	Cards Serial	Code	Cost Total	Time Total	Time Billed	Average Rate	CDRs List	Time Package	Calls Total	Calls Not Zero	Calls Success	Calls Busy	Calls No Channel	Calls Error	ASR Std	ASR Cur	ACD Std	ACD Cur	PDD Avg	SCD Avg
origination	2016	Client	N/A	1191	11.056800	2 516.23	2 516.23	0.004394		39.00	757	736	757	0	0	0	100.00	97.23	3.32	3.42	0.00	0.00
termination	2016	Client	N/A	1191	-16.056927	2 415.73	2 415.73	0.006647		0.00	727	706	727	0	0	0	100.00	97.11	3.32	3.42	0.00	0.00
origination	2016	Client	N/A	936	263.729982	2 030.58	2 030.58	0.129879		24.40	489	489	489	0	0	0	100.00	100.00	4.15	4.15	0.00	0.00
termination	2016	Client	N/A	936	-196.204509	1 927.25	1 927.25	0.101805		0.00	468	468	468	0	0	0	100.00	100.00	4.12	4.12	0.00	0.00
origination	2016	Client	N/A	200	234.807556	507.75	507.75	0.462447		0.00	137	137	137	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00
termination	2016	Client	N/A	200	-1.151089	507.75	507.75	0.002267		0.00	137	137	137	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00
origination	2016	Client	N/A	1201555	1.513409	332.43	332.43	0.004553		0.00	243	243	243	0	0	0	100.00	100.00	1.37	1.37	0.00	0.00
termination	2016	Client	N/A	1201555	-1.064259	332.43	332.43	0.003201		0.00	243	243	243	0	0	0	100.00	100.00	1.37	1.37	0.00	0.00
termination	2016	N/A	N/A	mismatched	N/A	219.08	0.00	N/A		0.00	59	59	59	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00

Side-by-side report

This tool allows building a report with side-by-side sub-reports. Use it to run a comparative analysis on the same page. It's helpful for reviewing multiple parameters, totals and compare results at different time intervals. The **"Compare Period"** option is designed to create a report that shows two sub-reports side-by-side.


To enable this option, click the plus sign  next to the "Period" and specify both intervals (*Period 1/Period 2*) for the report.

Screenshot: Summary Report section



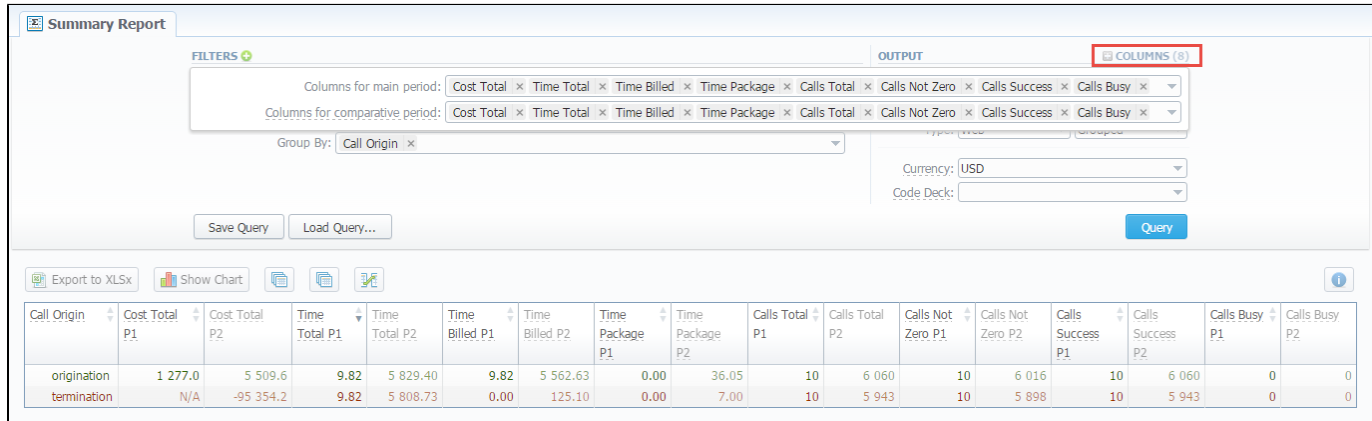
The screenshot shows the 'Summary Report' interface. In the 'FILTERS' section, the 'Period' dropdown is set to 'Last Week' with a date range of '2016-06-20 00:00:00' to '2016-06-26 23:59:59' and a time zone of 'UTC'. A red arrow points to a plus sign icon next to the 'UTC' dropdown. The 'OUTPUT' section shows 'Order By' set to 'Time Total', 'Limit' as 'No limit', 'Type' as 'Web', 'Grouped', 'Currency' as 'USD', and 'Code Deck' as an empty dropdown. There are 'Save Query' and 'Load Query...' buttons on the left and a 'Query' button on the right.

After, choose columns for main and comparative period in the report output form. When all required parameters are specified, click the "Query" button.

To remove this filter, please click the delete icon .

You can modify a comparative mode by changing periods and columns. For example, to compare how different the cost total of the two periods is in percentage terms. To do this, choose the "Cost Total (%)" value from the Columns. Therefore, the final report splits *Cost Total (%)* into separate columns (see screenshot below).

Screenshot: Summary Report section



The screenshot shows the 'Summary Report' interface with the 'OUTPUT' section. The 'COLUMNS (18)' dropdown is expanded, showing two rows of selected columns: 'Cost Total', 'Time Total', 'Time Billed', 'Time Package', 'Calls Total', 'Calls Not Zero', 'Calls Success', and 'Calls Busy'. The 'Group By' dropdown is set to 'Call Origin'. Below the interface is a table with 17 columns representing various metrics for two periods.

Call Origin	Cost Total P1	Cost Total P2	Time Total P1	Time Total P2	Time Billed P1	Time Billed P2	Time Package P1	Time Package P2	Calls Total P1	Calls Total P2	Calls Not Zero P1	Calls Not Zero P2	Calls Success P1	Calls Success P2	Calls Busy P1	Calls Busy P2
origination	1 277.0	5 509.6	9.82	5 829.40	9.82	5 562.63	0.00	36.05	10	6 060	10	6 016	10	6 060	0	0
termination	N/A	-95 354.2	9.82	5 808.73	0.00	125.10	0.00	7.00	10	5 943	10	5 898	10	5 943	0	0



When you use "Compare Period" option in the *Summary Report* and *Orig-Term Report* sections, default chart templates will not be accessible.

Knowledge Base Articles

- [Why are there differences between reports?](#)
- [How to hide rates in Summary Report for specific system users?](#)

Orig-Term Report

On this page

- [Orig-Term Report Query Form](#)
- [To create a new orig-term report](#)
- [Simple scheme: how to generate a orig-term report](#)
- [To create reports templates](#)
- [Orig-Term Report toolbar: export, chart.](#)
- [Side-by-side report](#)
- [Knowledge Base Articles](#)

Orig-Term Report Query Form

This tool allows you to generate a report and trace all call routes from the Client to any Provider with orig-term cost and profit. Here you can create a report based on an existing template or generate a new one. Also, you can get the information sorted by clients and calls, etc.

Screenshot: *Orig-Term Report form*

To create a new orig-term report

In order to create a statistic report go to the **Statistics** and open the **Orig-Term Report** section. Then you need to fill out the search form with next parameters:


Section	Field Description
Filters	Filters that will be used for generating a correct report. Click plus sign next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking the sign to delete.
	Period 1 Specify an interval for the report. Please note, that the "Period" field is mandatory. You can generate the report also for
	Period 2 Accessible when you enable the "Compare Period" option by clicking the plus sign next to the "Period". Specify the :
	Group By Select a grouping option, here you can choose and swap columns, change its order. There are following accessible opt <ul style="list-style-type: none"> • Time: Year, Month, Date, Time. • Clients: Orig Account/ Orig Code/ Orig Code Name/ Orig Rate/ Term Account/ Term Code/ Term Code Name/ Te • Extras: Orig Serial/ Orig Client Type/ Orig Owner/ Term Client Type/ Term Owner. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> Please note, the "Group By" field is mandatory, it couldn't be empty in order to generate the report. </div> <p>This option is intended to simply grouping option, now the system will automatically group data in specified columns.</p>
Additional Filters	

There are following accessible additional filters:

- **By clients:** Orig Client/ Orig Account/ Orig Code/ Orig Code Name/ Orig Serial/ Orig Owner/ Orig Group/ Term Client/ Term Account/ Te
- **By calls:** Calls Total/ Profit/ Minutes, Total/ Call Not Zero/ ASR Cur/ ACD Cur.
- **Extras:** Minutes, Total.

Screenshot: Orig-Term Report form/ Filters

FILTERS +		
Clients	Calls	Extras
Orig Client	Calls Total	Minutes, Total
Orig Account	Profit	
Orig Code	Calls Not Zero	
Orig Code Name	ASR Cur	
Orig Serial	ACD Cur	
Orig Owner		
Orig Group		
Term Client		

 Please use the Scroll Bar to see all settings in the pull-down list.

Origination Settings of Clients


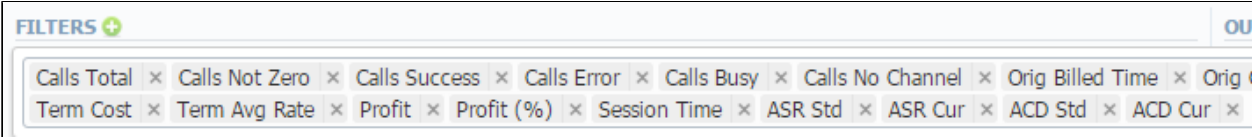
Orig Client	Define an origination client for the report
Orig Account	Enter an orig account for the report
Orig Code	Specify an orig code for the report
Orig Code Name	Indicate an orig code name
Orig Serial	Define an origination serial
Orig Owner	Define an Origination Reseller for report
Orig Group	Specify a general group for an orig client that will be used as filter criteria


Settings of Calls

Calls Total	Enter the range of total calls
Profit	Enter the range of the revenue you would like to display
Calls Not Zero	Define the range of calls, that have duration equal to or more than 1 second
ASR Current	Specify the range of "ASR Cur" for calls you would like to display
ACD Current	Specify the range of "ACD Cur" for calls you would like to display

Termination Settings of Clients

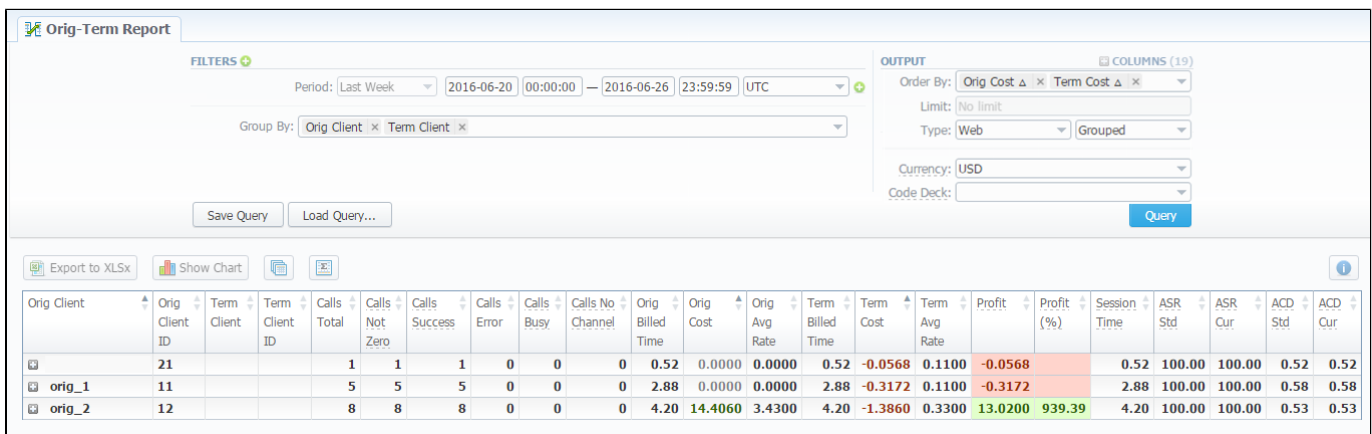
Term Client	Define a termination client for the report
Term Account	Enter a term account for the report
Term Code	Specify a term code for the report
Term Code Name	Indicate a term code name
Term Owner	Define a termination Reseller for report
Term Group	Specify a general group for a term client that will be used as filter criteria

Extra Settings	
Minutes, Total	Enter the range of total calls duration in minutes
Output	<p>This form contains settings of the output data of the report.</p> <p>Click plus sign  near the "Columns" to select respective columns to output a report data. Also, you can cancel any chosen item.</p>
Accessible columns in the report	
<p>Columns for main period and comparative period are following:</p> <p>ASR Std, ASR Cur, ACD Std, ACD Cur, Calls Total, Calls Success, Calls Error, Profit, Profit (%), Orig Billed Time, Orig Cost, Orig Avg Rate, i Session Time, Calls Not Zero, Calls Busy, Calls No Channel.</p> <p>Screenshot: Orig-Term Report form/columns</p>	
	
Orig	<p>Origination information:</p> <ul style="list-style-type: none"> • Billed Time - Billed call time • Cost - Price of the call • Avg. Rate - Average call rate
Term	<p>Termination information:</p> <ul style="list-style-type: none"> • Billed Time - Billed call time Call cost • Cost - Call cost • Avg. Rate Average call rate
Profit	<p>The revenue</p> <ul style="list-style-type: none"> • USD - Revenue in USD (in fact, any system currency can be specified here) • % - Revenue in percent value
Session Time	Total time of the session in minutes
ASR	<p>Average successful rate (successful calls percentage)</p> <ul style="list-style-type: none"> • Std - Number of calls with status "success" divided by total number of calls minus all calls with "no channel available" • Cur - Number of calls with duration > 0 divided by total number of calls
ACD, min	<p>Average call duration</p> <ul style="list-style-type: none"> • Std - Sum of all call duration divided by number of calls with status "success" • Cur - Sum of all call duration divided by number of calls with duration > 0
Calls	<p>Quantity of calls in database</p> <ul style="list-style-type: none"> • Total - Total calls quantity • Not Zero - Quantity of calls, that have duration equal to or more than 1 second • Success - Quantity of calls, that have duration equal to or more than 1 second and successful end code, calls with • Error - Quantity of declined calls • Busy - "Busy" calls quantity • No Channel - No circuit / channel available
Other output settings	
Order By	Select parameters to sort already grouped data in columns. Here you can sort data from highest to lowest values (or vice versa)

Type	<p>Choose a format of the report from a drop-down list: <i>Web/CSV/Excel XLS/Excel XLSx</i>.</p> <p>Also, select next to the "Type" field a look of table view:</p> <ul style="list-style-type: none"> • <i>Plain</i> - a simple table view • <i>Grouped</i> - a table view with grouped data and possibility to collapse it <p> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web</i> formats, it doesn't work</p>
Limit	Determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen p
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.
Code Deck	Select a code deck from a drop-down list. All codes in the following report will be presented according to the specified c




After selecting all needed parameters, click **"Query"** button and the system will generate a report:

Screenshot: *Orig-Term Report* window




The screenshot shows the 'Orig-Term Report' interface. It includes a 'FILTERS' section with a date range from 2016-06-20 to 2016-06-26, and a 'Group By' field set to 'Orig Client' and 'Term Client'. The 'OUTPUT' section shows 'Order By' as 'Orig Cost' and 'Term Cost', 'Limit' as 'No limit', 'Type' as 'Web', 'Currency' as 'USD', and 'Code Deck' as an empty field. Below these are buttons for 'Save Query', 'Load Query...', and 'Query'. At the bottom, there are options for 'Export to XLSx', 'Show Chart', and a table of data.

Orig Client	Orig Client ID	Term Client	Term Client ID	Calls Total	Calls Not Zero	Calls Success	Calls Error	Calls Busy	Calls No Channel	Orig Billed Time	Orig Cost	Orig Avg Rate	Term Billed Time	Term Cost	Term Avg Rate	Profit	Profit (%)	Session Time	ASR Std	ASR Cur	ACD Std	ACD Cur
	21			1	1	1	0	0	0	0.52	0.0000	0.0000	0.52	-0.0568	0.1100	-0.0568		0.52	100.00	100.00	0.52	0.52
orig_1	11			5	5	5	0	0	0	2.88	0.0000	0.0000	2.88	-0.3172	0.1100	-0.3172		2.88	100.00	100.00	0.58	0.58
orig_2	12			8	8	8	0	0	0	4.20	14.4060	3.4300	4.20	-1.3860	0.3300	13.0200	939.39	4.20	100.00	100.00	0.53	0.53

 If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the  plus or  minus signs.

To expand all data in the report, please press **Ctrl** and .

 Please note, the system shows rounded values in the reports. But while calculating the system takes an exact value. Hence, the procedure of the rounding is following:

- system rounds currency values according to the settings of a respective currency;
- the parameters of the time are rounded to the nearest hundredth. For example: 4.8763 to 4.88;
- and others are rounded to the nearest ten thousandth. For example: 3.879256 to 3.8793.

Simple scheme: how to generate a orig-term report

In order to create a simple orig-term report you need to:

- Choose respective **"Filters"** for the report.
- Enter the interval.
- Select some parameters in the **"Group By"** field, for example, *Orig Client*, *Orig Code*.
- Then choose **"Columns"** in the Output form, for example, *ASR Std*, *ASR Cur*, *ACD Std*, *ACD Cur*, *Calls Total*, *Calls Success*, *Calls Error*, *Profit (%)*.
- Leave **"Type"** *Web/Grouped* settings by default.
- Specify the currency and choose the code deck (if applicable).
- Click the **"Query"** button.

✔ If you want to **sort already grouped data** in columns, select respective parameters in **"Order By"**. Also, you can sort from highest to lowest values (or vice versa). To do this, select a respective value with arrows: ▲ or ▼ and change the **"Type"** of output from *Grouped* to *Plain*.

⚠ Please note, the **"Order By"** option is active when the **"Type"** of the Output form is **Plain**. When it is **Grouped**, the data is only sorting by values specified in the **"Group By"** field.

Also, you can sort data in report manually using special arrows ▲ ▼ next to the name of respective columns.

Screenshot: Orig-Term Report

Orig Code	ASR Std	ASR Cur
	100.00	100.00
38067	100.00	100.00
	100.00	100.00
1111	100.00	100.00
	42.42	100.00
3333	42.42	100.00

To create reports templates

Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Template form

Reports Templates

Title:

Reseller:

Visibility:

WATCH

Recipients:

Run Time:

Days of Week:

REPORT QUERY

FILTERS

Period 1: —

Compare Period 2: —

Group By:

OUTPUT

COLUMNS (18)

Order By:


Limit:

Type:

Currency:


Code Deck:


Section	Description
Orig-Term Report	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a Reseller for the report template
	<p>Visibility It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller.</p> <p>To enable this option, select one parameter from the drop-down list:</p> <ul style="list-style-type: none"> • Public - available for users according to the settings of the "Reseller" field; • Private - accessible strictly for creator.






Watch	This tool allows to automatically generate report at appropriate time and send results to the list of e-mails	
	<div style="border: 1px solid #ccc; padding: 5px;">  Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i>. </div>	
	Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week	
Report Query	Here you need to specify filters that will be used for generating correct report and choose the output type to view the report	

Orig-Term Report toolbar: export, chart.

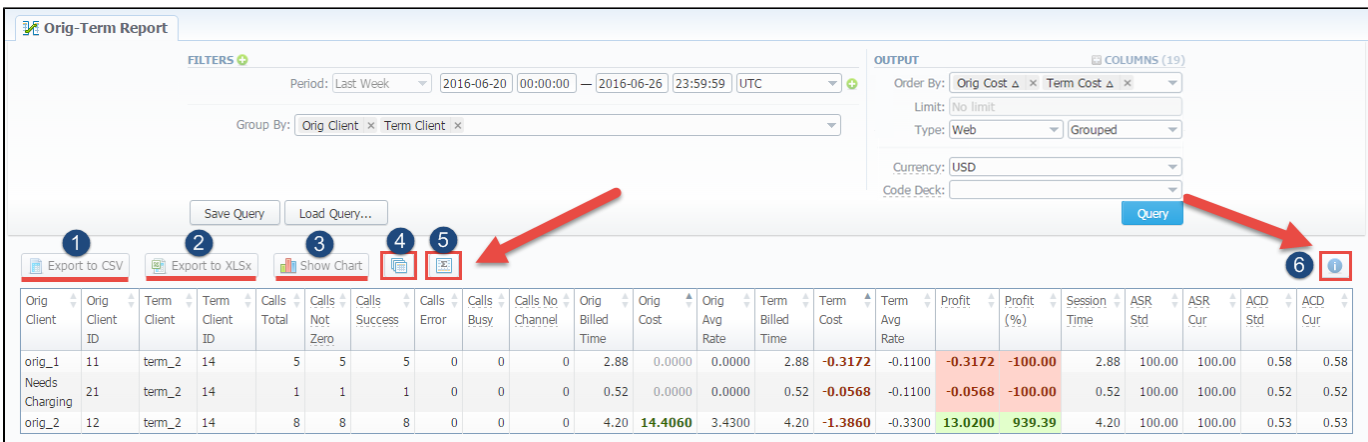
You can export data to a CSV and XLSx file which contains only currently presented data, no automatic request to update data while exporting. Also, it is possible to create charts for easily illustrating a crucial information. And you can generate a report using the same criteria in the *Orig-Term report* and the *CDRs list* sections.

1. To download a report in .csv, click the "Export to CSV"  button on the toolbar.

 Please note, this button will be visible only when the "Type" of the output is "Plain". For the "Grouped" output type it is not available.

2. To download a .xlsx file, click the "Export to XLSx"  button on the toolbar.
3. To create a visual chart, click the "Show Chart"  button on the toolbar. There is more information available on this topic in the article "How to create a statistic chart?" at our Knowledge Base.
4. You can generate a detailed report using the same criteria in the CDRs list by clicking the *CDRs list icon*  on the toolbar.
5. And it is possible to generate a report using the same criteria in the Summary report by clicking the *Summary icon*  on the toolbar.
6. You can check an **actual date interval** of the report by clicking the *Info icon*  and it could be different from the *Interval* specified above if there is no date for the period.

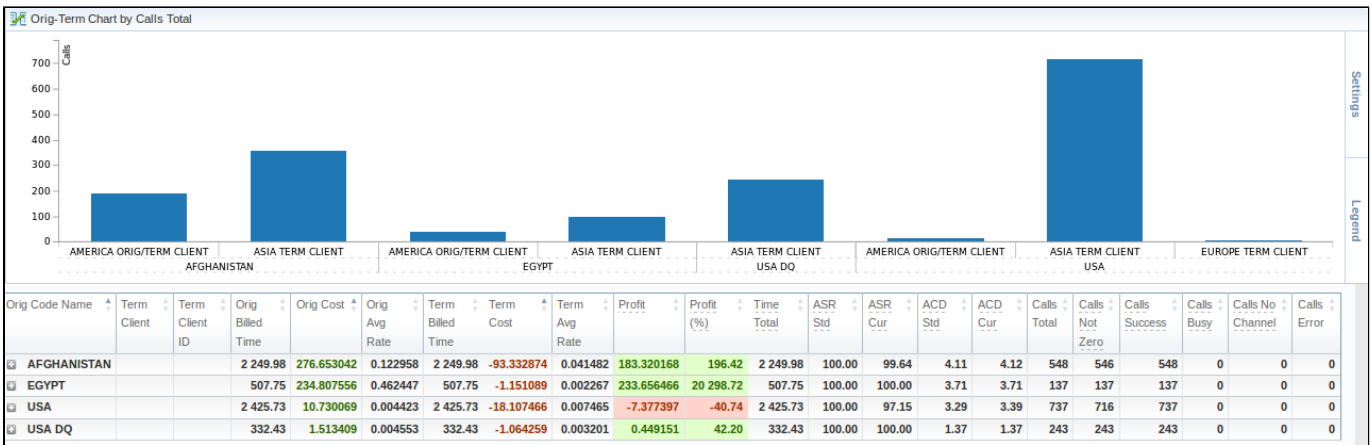
Screenshot: *Orig-Term Report* section



The screenshot shows the 'Orig-Term Report' interface. At the top, there are filter settings for 'Period' (Last Week) and 'Group By' (Orig Client, Term Client). On the right, there are output settings for 'Order By', 'Limit', 'Type' (Web), 'Currency' (USD), and 'Code Deck'. Below these are buttons for 'Save Query', 'Load Query...', and 'Query'. The toolbar contains six numbered callouts: 1. 'Export to CSV', 2. 'Export to XLSx', 3. 'Show Chart', 4. 'CDRs list icon', 5. 'Summary icon', and 6. 'Info icon'. Below the toolbar is a data table with columns for client information, call statistics, and financial metrics.

Orig Client	Orig Client ID	Term Client	Term Client ID	Calls Total	Calls Not Zero	Calls Success	Calls Error	Calls Busy	Calls No Channel	Orig Billed Time	Orig Cost	Orig Avg Rate	Term Billed Time	Term Cost	Term Avg Rate	Profit	Profit (%)	Session Time	ASR Std	ASR Cur	ACD Std	ACD Cur
orig_1	11	term_2	14	5	5	5	0	0	0	2.88	0.0000	0.0000	2.88	-0.3172	-0.1100	-0.3172	-100.00	2.88	100.00	100.00	0.58	0.58
Needs Charging	21	term_2	14	1	1	1	0	0	0	0.52	0.0000	0.0000	0.52	-0.0568	-0.1100	-0.0568	-100.00	0.52	100.00	100.00	0.52	0.52
orig_2	12	term_2	14	8	8	8	0	0	0	4.20	14.4060	3.4300	4.20	-1.3860	-0.3300	13.0200	939.39	4.20	100.00	100.00	0.53	0.53

Screenshot: *Orig-Term Report* section/ chart



Orig Code Name	Term Client	Term Client ID	Orig Billed Time	Orig Cost	Orig Avg Rate	Term Billed Time	Term Cost	Term Avg Rate	Profit	Profit (%)	Time Total	ASR Std	ASR Cur	ACD Std	ACD Cur	Calls Total	Calls Not Zero	Calls Success	Calls Busy	Calls No Channel	Calls Error
AFGHANISTAN			2 249.98	276.653042	0.122958	2 249.98	-93.332874	0.041482	183.320168	196.42	2 249.98	100.00	99.64	4.11	4.12	548	546	548	0	0	0
EGYPT			507.75	234.807556	0.462447	507.75	-1.151089	0.002267	233.656466	20 298.72	507.75	100.00	100.00	3.71	3.71	137	137	137	0	0	0
USA			2 425.73	10.730069	0.004423	2 425.73	-18.107466	0.007465	-7.377397	-40.74	2 425.73	100.00	97.15	3.29	3.39	737	716	737	0	0	0
USA DQ			332.43	1.513409	0.004553	332.43	-1.064259	0.003201	0.449151	42.20	332.43	100.00	100.00	1.37	1.37	243	243	243	0	0	0


Side-by-side report

This tool allows building a report with side-by-side sub-reports. Use it to run a comparative analysis on the same page. It's helpful for reviewing multiple parameters, totals and compare results at different time intervals. The **"Compare Period"** option is designed to create a report that shows two sub-reports side-by-side.

To enable this option, click the plus sign  next to the "Period" and specify both intervals (Period 1/Period 2) for the report.

Screenshot: Orig-Term Report query form

After, choose columns for main and comparative period in the report output form. When all required parameters are specified, click the "Query" button.

To remove this filter, please click the delete icon .

You can modify a comparative mode by changing periods and columns. For example, to compare how different the profit of the two periods is in percentage terms, choose the "Profit (%)" value from the Columns. Therefore, the final report splits the Profit (%) into separate columns.

Screenshot: Orig-Term Report example

Orig-Term Report

FILTERS OUTPUT COLUMNS (9)

Columns for main period: Orig Billed Time × Orig Cost × Orig Avg Rate × Term Billed Time × Term Cost × Term Avg Rate × Profit × Time Total × ASR Std ×

Columns for comparative period: Orig Billed Time × Orig Cost × Orig Avg Rate × Term Billed Time × Term Cost × Term Avg Rate × Profit × Time Total × ASR Std ×

Currency: USD
Code Deck:

Save Query Query

Export to XLSx Show Chart ?

Month	Orig Billed Time P1	Orig Billed Time P2	Orig Cost P1	Orig Cost P2	Orig Avg Rate P1	Orig Avg Rate P2	Term Billed Time P1	Term Billed Time P2	Term Cost P1	Term Cost P2	Term Avg Rate P1	Term Avg Rate P2	Profit P1	Profit P2	Time Total P1	Time Total P2	ASR Std P1	ASR Std P2
05/2016	0.00	41.87	0.0	1 319.5	0.000	31.517	0.00	0.00	0.0	0.0	0.000	0.000	0.0	1 319.5	0.00	47.48	0.00	100.00
06/2016	0.00	14.65	0.0	-34.2	0.000	2.336	0.00	0.00	0.0	0.0	0.000	0.000	0.0	-34.2	0.00	14.65	0.00	100.00
04/2016	0.00	0.00	0.0	0.0	0.000	0.000	0.00	0.00	0.0	0.0	0.000	0.000	0.0	0.0	0.00	1.33	0.00	100.00
03/2016	0.00	123.23	0.0	54.9	0.000	0.445	0.00	65.47	0.0	-60.7	0.000	0.928	0.0	-5.9	0.00	182.32	0.00	100.00
02/2016	0.00	50.20	0.0	2 084.6	0.000	41.526	0.00	37.37	0.0	-1 254.8	0.000	33.581	0.0	829.8	0.00	130.77	0.00	100.00
01/2016	0.00	5 322.10	0.0	612.0	0.000	0.115	0.00	12.00	0.0	-362.6	0.000	30.220	0.0	249.4	0.00	5 359.52	0.00	100.00

Knowledge Base Articles

- [Why are there differences between reports?](#)

Profit Report

On this page:

- [Profit Report Query Form](#)
- [Creating Profit Report](#)
- [To create query template](#)
- [Export generated report](#)
- [Side-by-side report](#)

Profit Report Query Form

This section allows generating the profit report. It analyses profitability data and defines profits between *Reseller* parties (companies and managers) and *Clients* belonging to the respective *Reseller/Manager*.

For example, when *Manager_1* executes profitability report, it allows to see his origination customers sending traffic to *Manager_2*, who owns actual terminator vendors. In this case, Reseller permissions apply to every query, it guarantees that *Manager_1* will not be able to see any actual name of a client belonging to another manager, or another party, that restricts such access.

Screenshot: Profit Report query form

The screenshot shows the 'Profit Report' query form interface. It is divided into two main sections: 'FILTERS' and 'OUTPUT'.
FILTERS: Includes a 'Period' dropdown set to 'Today' with a date range of '2016-06-29 00:00:00' to '2016-06-29 23:59:59' and 'UTC' time zone. 'Reseller' is set to 'Company Name'. 'Mode' is 'All visible'. 'Group By' is set to 'Income Client', 'Outcome Client', and 'Package Name'. A 'Save Query' button is at the bottom left.
OUTPUT: 'Order By' is set to 'Income Cost' and 'Outcome Cost'. 'Limit' is 'No limit'. 'Type' is 'Web' and 'Grouped'. 'Currency' is 'USD'. 'Code Deck' is empty. A 'Query' button is at the bottom right.

Creating Profit Report



For generating a profit report you need to go to the **Statistics** and open the **Profit Report** section. Then, form the report by specifying required values. To get information sorted, use the "Group by" option and choose respective values from the drop-down list.

Fill out the search form with next parameters:

Section	Field Description
---------	-------------------

Filters

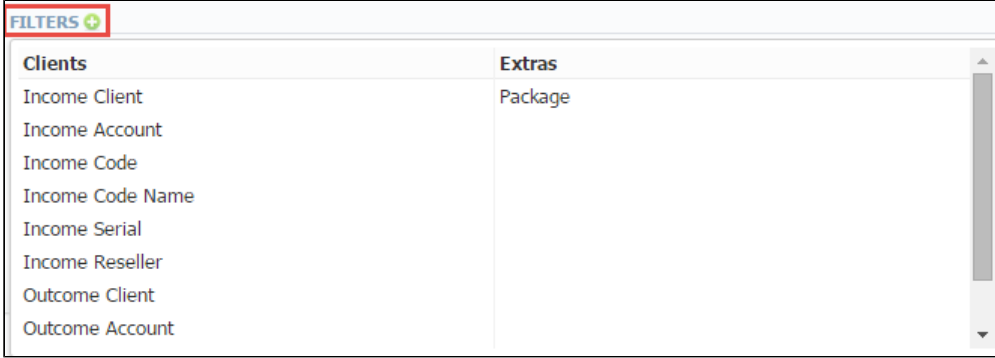
Filters that will be used for generating a correct report.


Click plus sign  next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking the sign  to delete.

There are following accessible filters:

- **By clients:** *Income Client/ Income Account/ Income Code/ Income Code Name/ Income Serial/ Income Reseller/ Outcome Client/ Outcome Account/ Outcome Code/ Outcome Code Name.*
- **Extras:** *Package*

Screenshot: Profit Report form/ Filters




 Please use the Scroll Bar to see all settings in the pull-down list

Period 1

Specify an interval for the report.

Period 2

Accessible when you enable the "Compare Period" option by clicking the plus sign  next to the "Period". Specify the second interval for the report.

Reseller

Specify the name of respective Reseller.

Mode


Choose the mode of the report:

- **All visible** - all represented visually.
- **Hide External Originators** - prevent from being seen all external originators.
- **Hide External Clients** - prevent from being discovered all external clients.

Group By


Select a grouping option, here you can choose and swap columns, change its order. There are following accessible options to group the data in reports:

- **Time:** *Year, Month, Date, Time;*
- **Clients:** *Income Client/ Inc Account/ Inc Code/ Inc Code Name/ Income Rate/ Inc Reseller/ Outcome Client/ Out Account/ Out Code/ Out Code Name/ Expense Rate / Package Name*
- **Extras:** *Income Series*

 Please note, the "Group By" field is mandatory, it couldn't be empty in order to generate the report.

Output

This form contains settings of the output data of the report.

Click plus sign  near the "Columns" to select respective columns to output report data. Also, you can delete any chosen value by clicking delete sign.



Following columns to add to the report

Columns for main period:

Total time, min; Income Rate, Outcome Rate, Income Cost, Income Avg Rate, Income Billed Time, Outcome Cost, Outcome Avg Rate, Outcome Billed Time, Profit, Profit (%).

Columns for comparative period:

Total time, min; Income Rate, Outcome Rate, Income Cost, Income Avg Rate, Income Billed Time, Outcome Cost, Outcome Avg Rate, Outcome Billed Time, Profit. And it's possible to choose each parameter expressed as percentage.

Total Time	Total time of the calls in minutes
Rate	<i>The call rate</i> <ul style="list-style-type: none">• Income Rate - a call rate that is used for origination• Income Avg Rate - an average call rate that is used for origination• Outcome Rate - a call rate that is used for termination• Outcome Avg Rate - an average call rate that is used for termination
Profit	<i>The revenue</i> <ul style="list-style-type: none">• USD - a revenue in USD (in fact, any system currency can be specified here)• % - a revenue in percent value
Time	<i>The billed time</i> <ul style="list-style-type: none">• Income Billed Time - the whole billed time for origination• Outcome Billed Time - the whole billed time for termination
Cost	<i>The call cost</i> <ul style="list-style-type: none">• Income Cost - a call cost that is used for origination• Income Avg Cost - an average call cost that is used for origination• Outcome Cost - a call cost that is used for termination• Outcome Avg Cost - an average call cost that is used for termination
Other output settings	
Order By	Select parameters to sort already grouped data in columns. There are following accessible options to order the data: <i>by Time, Clients, Extras</i> . Here you can sort data from highest to lowest values (or vice versa) and select different values.
Type	Choose a format of the report from a drop-down list: <i>Web/CSV/Excel XLS/Excel XLSx</i> . Also select next to the "Type" field a table view: <ul style="list-style-type: none">• <i>Plain</i> - a simple table view• <i>Grouped</i> - a table view with grouped data and possibility to collapse it <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web formats</i>, it doesn't work with <i>CSV</i>.</div>
Limit	Determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen parameter. It is available only for plain type of the report.
Send to	You can send generated reports via e-mail. For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> This feature is available only for <i>CSV/Excel XLS/Excel XLSx</i> formats of the report, it doesn't work with <i>Web</i>.</div>
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.

Code Deck	Using a drop-down list select a respective code deck. All codes names will be rewritten and presented according to the specified code deck. If there is no value specified, code deck assigned to the Client or Rate Table will be in usage.
------------------	---

After selecting all needed parameters, click **"Query"** button and the system will generate a report:

Screenshot: Profit Report window

The screenshot shows the 'Profit Report' window. On the left, there are 'FILTERS' for 'Period 1' (Last 30 Days, 2016-05-31 00:00:00 to 2016-06-29 23:59:59 UTC), 'Compare Period 2' (This Year, 2016-01-01 00:00:00 to 2016-12-31 23:59:59), 'Reseller' (Company Name), 'Mode' (All visible), and 'Group By' (Package Name). A 'Save Query' button is at the bottom left. On the right, 'OUTPUT' settings include 'Order By' (Income Cost, Outcome Cost), 'Limit' (No limit), 'Type' (Web, Grouped), 'Currency' (USD), and 'Code Deck'. A 'Query' button is at the bottom right. Below the filters is an 'Export to XLSx' button. The main area contains a table with columns: Package Name, Total Time, min P1, Total Time, min P2, Profit P1, Profit P2, and a final column with values 19.93 and 293.41. A tooltip shows data periods and generation info.

Package Name	Total Time, min P1	Total Time, min P2	Profit P1	Profit P2		
N/A	0.00	142.60	0.0	0.0		19.93
	0.00	0.00	-30.7		90.00	293.41
	0.00	0.00	50.0		50.0	0.00

i If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the **+** plus or **-** minus signs.

! Please note, the system shows rounded values in the reports. But while calculating the system takes an exact value. Hence, the procedure of the rounding is following:

- system rounds currency values according to the settings of a respective currency;
- other parameters are rounded to the nearest ten thousandth. For example: 3.879256 to 3.8793.


To create query template

Also, you can create a template for profit reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Template form

The screenshot shows the 'Reports Templates' form. It includes fields for 'Title' (Reports Template 1), 'Reseller' (Company Name), and 'Visibility' (Public). There is a 'WATCH' checkbox and a 'Recipients' field. 'Run Time' is set to 06:00 and 'Days of Week' is Mo x Tu x We x Th x Fr x Sa x Su x. The 'REPORT QUERY' section has 'FILTERS' for 'Period 1' (Today, 2016-06-27 00:00:00 to 2016-06-27 23:59:59 UTC), 'Compare Period 2' (Today, 2016-06-27 00:00:00 to 2016-06-27 23:59:59), and 'Group By' (Call Origin). The 'OUTPUT' section has 'COLUMNS (18)', 'Order By' (Time Total), 'Limit' (No limit), 'Type' (CSV, Grouped), 'Currency' (USD), and 'Code Deck' (DEFAULT). 'OK', 'Cancel', and 'Apply' buttons are at the bottom right.

Section	Description
---------	-------------

Profit report	Here you can specify parameters for the template that will be used while running reports	
	Title	Specify a name of the template
	Reseller	Indicate a Reseller of the report template
	Visibility	<p>It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller.</p> <p>To enable this option, select one parameter from the drop-down list:</p> <ul style="list-style-type: none"> • Public - available for users according to the settings of the "Reseller" field; • Private - accessible strictly for creator.
Watch	This tool allows to automatically generate reports at the appropriate time and send the results to the list of e-mails	
	<div style="border: 1px solid #ccc; padding: 5px;">  Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i>. </div>	
	Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week
Report Query	Here you need to specify filters that will be used for generating a correct report and choose the output type to view the report.	


To load already existed templates while generating statistic reports, click the "**Load Query**" button in the *Profit Report section*.

Export generated report

You can export data to *XLSx* file which contains only currently presented data, no automatic request to update data while exporting.

To download a *.xlsx* file, click the "**Export to XLSx**" button on the toolbar.



Please note, that you can check an **actual date interval** of the report by clicking the icon  and it could be different from *the Interval* specified above if there is no date for the period.


Side-by-side report

This tool allows building a report with side-by-side sub-reports. Use it to run a comparative analysis on the same page. It's helpful for reviewing multiple parameters, totals and compare results at different time intervals. The "**Compare Period**" option is designed to create a report that shows two sub-reports side-by-side.

To enable this option, click the plus sign  next to the "*Period*" and specify both intervals (*Period 1/Period 2*) for the report.

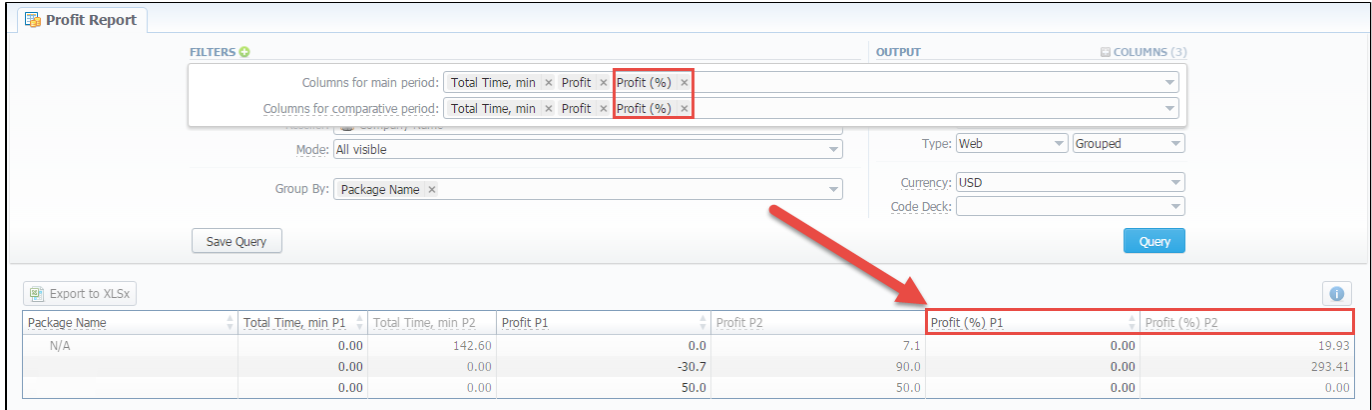
Screenshot: *Profit Report query form*

After, choose columns for main and comparative period in the report output form. When all required parameters are specified, click the "**Query**" button.

To remove this filter, please click the delete icon .

You can modify a comparative mode by changing periods and columns. For example, to compare how different the profit of the two periods is in percentage terms, choose the "Profit (%)" value from the Columns. Therefore, the final report splits the Profit (%) into separate columns (see screenshot below).

Screenshot: Profit Report query form



The screenshot shows the 'Profit Report' query form. The 'FILTERS' section includes dropdowns for 'Columns for main period' and 'Columns for comparative period', both set to 'Total Time, min', 'Profit', and 'Profit (%)'. The 'Group By' is set to 'Package Name'. The 'OUTPUT' section shows 'Type: Web', 'Grouped', 'Currency: USD', and 'Code Deck'. A red arrow points from the 'Profit (%)' filter to the 'Profit (%) P1' and 'Profit (%) P2' columns in the table below.

Package Name	Total Time, min P1	Total Time, min P2	Profit P1	Profit P2	Profit (%) P1	Profit (%) P2
N/A	0.00	142.60	0.0	7.1	0.00	19.93
	0.00	0.00	-30.7	90.0	0.00	293.41
	0.00	0.00	50.0	50.0	0.00	0.00

LCR Lists

On this page

- [LCR List Query Form](#)
- [To create LCR report](#)
- [To create a new template](#)
- [Export generated report](#)






LCR List Query Form

This tool allows you to generate target lists of actual traffic for specified period.

Screenshot: LCR Lists section query form

To create LCR report


In order to create a new *LCR report* go to the **Statistics** section and open the **LCR Lists**. Then you need to fill out the search form with next parameters:

Section	Field Description
Filters	<p>Filters that will be used for generating a correct report.</p> <p>Click plus sign  next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking sign  for deleting.</p>
Interval	<p>Specify an interval for the report and the time zone.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  Please note, that the "Interval" field is mandatory and should be filled out in order to make a report. </div>
Group By	<p>Select a grouping option, here you can choose respective values to sort the data. There are following accessible options to in reports:</p> <ul style="list-style-type: none"> • Code • Code Name <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  Please note, the "Group By" field is mandatory, it couldn't be empty in order to generate the report. To group by code output. </div> <p>This option is intended to simply grouping option, the system will automatically group data in specified columns.</p> <div style="border: 1px solid #f00; padding: 5px; margin-top: 10px;">  When you select the grouping by code name, please be aware that simulation marks will not be shown and effective the next rate, may not be accurate. This data is taken from one of codes of the group. </div>
Additional Filters	

There are following accessible additional filters:

- **By clients:** Client Group/ Owner
- **By calls:** Code/ Code Name
- **Extras:** Show vendors /Show total calls/ Routes Limit

Screenshot: LCR Lists section

FILTERS 		
Clients	Calls	Extras
Client Group	Code	Show vendors
Owner	Code Name	Show total calls
		Routes Limit

Origination Settings of Clients

Client Group	Define a client group to generate the <i>LCR report</i>
Owner	Enter an owner/reseller, whose information should be displayed
Settings of Calls	
Code	Enter the code of desired destination here
Code Name Codes Name	Enter the code name you would like to display
Extra settings	
Show vendors	Specify whether you need vendor/terminator names to be displayed in the report or not, tick the check box
Show total calls	Tick this check box if you want that total calls amount will be shown.
Routes Limit	Choose the filter "Routes Limits" and indicate the number of route limit that will be shown. To display all possible routes leave empty.

Output

This form contains settings of the output data of the report.

Click plus sign  near the "**Columns**" to select respective columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report

There are following columns to add to the report:

- **Code**
- **Code Name**
- **Total Time**

Screenshot: LCR Lists section


OUTPUT
Code × Code Name × Total Time ×

Other output settings

Type	Choose a format of the report from a drop-down list: Web/CSV/Excel XLS/Excel XLSx . The table view of the report is Plain by default.
Send to	You can send generated reports via e-mail. For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails.




This feature is available only for CSV/Excel XLS/Excel XLSx formats of the report, it doesn't work with Web form

Currency	Specify a currency for a report. And all values will be automatically converted in the report to the specified currency.
Code Deck	<p>Select a code deck from a drop-down list. All code decks in the following report will be presented according to the specified data will be unified by code names.</p> <div style="border: 1px solid red; padding: 5px;"> <p> Please be aware, that if you do not specify the code deck, the system will use the code decks assigned to each pul rate table.</p> </div>

To create a new template

Also, you can create a template and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Query Template form

Section	Description
LCR Lists	Here you can specify parameters for the template that will be used while running reports.
	Title Specify a name of the template.
	Reseller Indicate a Reseller for the report template.
Watch	This tool allows to automatically generate the report at the appropriate time and send the results to the list of e-mails.
	 Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i> .
	Recipients Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of the week.
Report Query	Here you need to check filters and the output type. These values will be pre-selected by default according to the formed rate analysis query.

To load already existed templates while generating a report, click **"Load Query"** button in the query form.

Screenshot: LCR Lists form

LCR Lists

FILTERS

Interval: Last Week | 2016-01-11 00:00:00 – 2016-01-17 23:59:59 UTC

Group By: code

Save Query | Load Query...

OUTPUT | COLUMNS (3)

Type: CSV | Plain

Send To:

Currency: USD

Code Deck:

Query

Export to CSV | Export to XLSx

Code	Code Name	Total Time		Route #1	Route #2
431	AUSTRIA VIENNA	301.10	Time, min: Rate, USD: ASR, %: ACD, min:	130.15 -0.308800 100.00% 4.07	170.95 -0.200000 100.00% 3.56
380	Europe	65.37	Time, min: Rate, USD: ASR, %: ACD, min:	65.37 -1.000000 100.00% 5.45	



 Please note, the **code deck** should be assigned in the **Rate Tables** of the **Terminator** settings in order to generate the LCR report.

Export generated report

You can export data to a CSV and XLSx file which contains only currently presented data, no automatic request to update data while exporting.

To download a report in .csv, click the "Export to CSV" button on the toolbar.

To download a .xlsx file, click the "Export to XLSx" button on the toolbar.

 Please note, that you can check an actual date interval of the report by clicking the icon  and it could be different from the Interval specified above if there is no date for the period.

CDRs List

On this page

- [CDRs List Query Form](#)
- [To create CDR report](#)
- [To create query template](#)
- [Knowledge Base Articles](#)

CDRs List Query Form

This section allows you to form a detailed calls statistics on each client with a description of every call parameter. Here you can create a report based on an existing template or generate a new one. The main window represents a query form similar to those of other reports:

Screenshot: CDRs List query form

To create CDR report

In order to create a new CDR list go to the **Statistics** section and open the **CDRs List**. Then you need to fill out the search form with next parameters:


Section	Field Description
Filters	Filters that will be used for generating respective reports. Click plus sign next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking the sign to delete.
Interval	Specify an interval for the report. Please note, that the "Interval" field is mandatory.
Additional Filters	
There are following accessible additional filters:	
<ul style="list-style-type: none"> • By clients: Client Type, Client, Account, Client Group, Cards Serial, Package. • By calls: Code, Code Name, Cost, Call Origin, Result Status, Disconnect Code, VoIP Gateway. • Extras: Owner, Rate, Extra Rate, DST Number, SRC Number, Conf ID, CDR ID, Session Time, Status, Match Clients, Match Codes, Cu 	

Screenshot: CDRs list form/ Filters

Client Type	Select a client's type for report (<i>Client, Reseller, Calling card or Call shop</i>)
Client	Define a client for the report
Account	Enter an account for the report
Client group	Define a client's group
Cards Serial	Indicate cards serial for the report
Package	Enter a package for the report
Code	Specify a code of needed destination
Code Name	Specify a code name of the desired destination
Cost	Enter the range of call cost
Call Origin	Indicate call origination/termination
Result Status	Choose a call processing state: <ul style="list-style-type: none"> • Success • Busy • No channel • Error
Disconnect Code	Define a disconnect code as a filtering parameter
VoIP Gateway	Specify a VoIP host as filtering criteria
Owner	Indicate the owner
Time Total	Enter the range of total calls duration in minutes
Rate	Indicate the destination rate of the call
Extra Rate	Specify extra destination rate (per 1 minute) that was used. The settings you may find in the respective Rate Table/ E
DST Number	Billed destination number
SRC Number	Billed source number
Conf ID	Conference ID value
CDR ID	CDR ID value
Session Time	Call duration
Status	Specify call processing state: <ul style="list-style-type: none"> • all • processed • in rerating
Match Clients	Choose a respective state: <ul style="list-style-type: none"> • matched clients (identified), • mismatched clients (not identified).
Match Codes	Choose a respective state: <ul style="list-style-type: none"> • matched codes, • mismatched codes.
Currency	Indicate a respective currency

Output

This form contains settings of the output data of the report.

Click plus sign  near the "**Columns**" and select columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report

There are following columns to add to the report:

- **By clients**
- **By calls**
- **Extras**

Screenshot: CDRs list form/columns

FILTERS +

Leg Origin × Call Time × Client Type × Client ID × Client × Account ID × Account × Cards Serial × Owner ID × Code × Session Time × Billed Time × Package Time × Package Credit × Package ID × Package Name × Currency × Cost Extra × Cost Total × Taxes Value × Gateway IP × Gateway Name × SRC Number × DST Number × Disconnect Setup Time × Connect Time × Disconnect Time × PDD × SCD × Conf ID × Call ID × SRC Number EXT × DST Number × DST Number BILL × VoIP Gateway ID × VoIP Gateway × CDR Source × CDR ID × Uniq Sign × Bytes IN × Bytes OU

Other output settings

Order By	Select parameters to sort already grouped data in columns. Here you can sort data from highest to lowest values (or v
Type	Choose a format of the report from a drop-down list: <i>Web/CSV/Excel XLS/Excel XLSx</i> . The "Plain" type of view is by c
Send to	<p>You can send generated reports via e-mail.</p> <p>For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails.</p> <div style="border: 1px solid #ffc107; padding: 5px; margin-top: 10px;"> <p> This feature is available only for <i>CSV/Excel XLS/Excel XLSx</i> formats of the report, it doesn't work with <i>Web</i>.</p> </div>
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.
Code Deck	Select a code deck from a drop-down list. All codes in the following report will be presented according to the specified

After selecting all needed parameters, click **"Query"** button and the system will generate a report:

Screenshot: CDRs List report window

FILTERS +

Interval: Last Week | 2016-01-18 00:00:00 — 2016-01-24 23:59:59 | GMT-1

Status: all

OUTPUT COLUMNS (41)

Order By: Call Time

Type: Web | Plain

Currency: USD

Code Deck:

Leg Origin	Call Time	Client Type	Client	Account ID	Cards Serial	Owner ID	Owner	Code Country	Code Name	Code	Session Time	Billed Time	Package Time	Package Name	Currency	Rate	Extra Rate	Rate Total	Cost	Cost Extra	Cost Total
origination	01/22/2016 13:38:33 -0100	Client	orig_2	178	N/A	3	Company Name	USA	USA	1	0:00:55	0:00:55	0:00:55	ChargeEnabled	USD	1.1100	0.1000	1.2100	0.0000	0.0000	0.0000
termination	01/22/2016 13:38:33 -0100	Client	term_2	182	N/A	3	Company Name	USA	USA	1	0:00:55	0:00:55	0:00:00	N/A	USD	0.1100	0.0000	0.1100	-0.1008	0.0000	-0.1008

To create query template

Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Query Template form

Section	Description						
CDRs List	Here you can specify parameters for the template that will be used while running reports						
	<table border="1"> <tr> <td>Title</td> <td>Specify a name of the template</td> </tr> <tr> <td>Reseller</td> <td>Indicate a Reseller for the report template</td> </tr> </table>	Title	Specify a name of the template	Reseller	Indicate a Reseller for the report template		
Title	Specify a name of the template						
Reseller	Indicate a Reseller for the report template						
Watch	This tool allows to generate reports at the appropriate time and send results to the list of e-mails. Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i> .						
	<table border="1"> <tr> <td>Recipients</td> <td>Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties</td> </tr> <tr> <td>Run Time</td> <td>Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"</td> </tr> <tr> <td>Days of Week</td> <td>Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week</td> </tr> </table>	Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties	Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"	Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week
	Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties					
	Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"					
Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week						
Report Query	Here you need to specify filters that will be used for generating correct report and choose the output type to view the report						

Screenshot: CDRs List form

Leg Origin	Call Time	Client Type	Client	Account ID	Cards Serial	Owner ID	Owner	Code Country	Code Name	Code	Session Time	Billed Time	Package Time	Package Name	Currency	Rate	Extra Rate	Rate Total	Cost	Cost Extra	Cost Total
origination	01/22/2016 13:38:33 -0100	Client	orig_2	178	N/A	3	Company Name	USA	USA	1	0:00:55	0:00:55	0:00:55	ChargeEnabled	USD	1.1100	0.1000	1.2100	0.0000	0.0000	0.0000

1. To load already existed templates while generating statistic reports click **"Load Query"** button in the *CDRs List* section.
2. You can export data in *CSV* or *XLSx* file that contains only currently presented data, **no automatic request to update data while exporting**.

- To download a *.csv* file, click the **"Export to CSV"** button on the toolbar.
- To download a *.xlsx* file, click the **"Export to XLSx"** button on the toolbar.

Knowledge Base Articles

- What to do if there is no new statistics?
- Why new xDRs are not generated?

Mismatches Report

On this page:

- [Mismatches Report List](#)
- [Running New Mismatches Report](#)
- [Knowledge Base Articles](#)


Mismatches Report List

This section allows you to find **unrecognized calls/clients** by the system due to unavailability of respective information. Here you can see the general info about unknown clients, unknown destinations, calls stats, the total number of mismatched calls.

Running New Mismatches Report

To create a report you need to fill out the following fields in the form and click the **“Query”** button nearby.

Filters	Description
Type	Choose the type of calls for generating the report: <i>all, origination, termination</i> .
Duration	Select the continuance of the calls: <i>all, non-zero, zero</i> .
Output	Indicate the output type: <i>Web, CSV, Excel XLSx, Excel XLS</i> .

Also, you can specify the **“Interval”** for the report by clicking the icon  at the top of the page and an additional form will appear.

Screenshot: *Mismatches Report section additional form*



Interval: 2016-01-18 00:00:00 — 2016-01-19 23:59:59 UTC

Then, the system processes your request and transfers to the *CDRs List section* for detailed data collection. In the *CDRs List section*, you will have a query form with pre-selected values. In order to receive the details about respective calls click the **“Query”** button in the *CDRs List section*.

There are 3 types of the report with mismatched calls:

- **Calls with Unknown Clients** - means calls with unrecognized clients.
- **Calls with Known Clients** - means calls with unrecognized destinations.
- **Calls with Known Reseller** - means calls with unrecognized destinations or unknown destinations in Resellers.

Screenshot: *Mismatches Report section main window*

Mismatches Report

CALLS WITH UNKNOWN CLIENTS

	origination	termination	all
Total Calls	0	0	0
Non Zero Calls	0	0	0
Total Time	0 min	0 min	0 min

Type: all
Duration: non-zero
Output: Web
Query

CALLS WITH UNKNOWN DESTINATIONS (KNOWN CLIENTS)

	origination	termination	all
Total Calls	25	25	50
Non Zero Calls	25	25	50
Total Time	112 min	112 min	223 min

Type: all
Duration: non-zero
Output: Web
Query

CALLS WITH UNKNOWN DESTINATIONS IN RESELLERS (KNOWN RESELLERS)

	origination	termination	all
Total Calls	0	0	0
Non Zero Calls	0	0	0
Total Time	0 min	0 min	0 min

Type: all
Duration: non-zero
Output: Web
Query

Knowledge Base Articles

- [What does it mean when client or destination is "unknown" in reports?](#)

Calls Rerating

On this page

- [Calls Rerating Query Form](#)
- [Performing Calls Rerating](#)
- [Knowledge Base Articles](#)

Calls Rerating Query Form

This section allows to rerate calls. It's useful when some changes were applied to the rates, currencies, client accounts or you need to correct errors with *Missmatches Report*.

Screenshot: Calls Rerating section/ query form

Performing Calls Rerating

This procedure has 3 steps to perform a rerating:

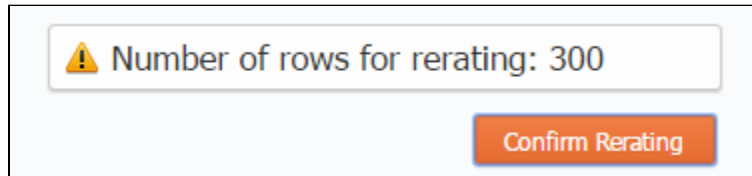
1. **Choose filters, specify an interval and respective values in the query form** (ex. client, code name, respective VoIP Gateway) and click "Query" button.

Section	Field Description																		
Filters	Filters that will be used for generating a correct report.																		
	Click plus sign next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking sign for deleting.																		
	Additional Filters																		
	There are following accessible additional filters:																		
	<ul style="list-style-type: none"> • Clients: Client, Client Group. • Calls: Code, Code Name, Call Origin, Result Status. • Extras: Match Clients, Match Codes, Duration. 																		
	<table border="1"> <thead> <tr> <th>Clients</th> <th>Calls</th> <th>Extras</th> </tr> </thead> <tbody> <tr> <td>Client</td> <td>Code</td> <td>Match Clients</td> </tr> <tr> <td>Client Group</td> <td>Code Name</td> <td>Match Codes</td> </tr> <tr> <td></td> <td>Call Origin</td> <td>Duration</td> </tr> <tr> <td></td> <td>Result Status</td> <td></td> </tr> <tr> <td></td> <td>VoIP Gateway</td> <td></td> </tr> </tbody> </table>	Clients	Calls	Extras	Client	Code	Match Clients	Client Group	Code Name	Match Codes		Call Origin	Duration		Result Status			VoIP Gateway	
Clients	Calls	Extras																	
Client	Code	Match Clients																	
Client Group	Code Name	Match Codes																	
	Call Origin	Duration																	
	Result Status																		
	VoIP Gateway																		
	Settings of the Clients																		
Client	Define a client for the report.																		
Client Group	Enter a client group for the report.																		
	Call Settings																		

Code	Define a code of needed destination.
Code Name	Enter a code name of desired destination.
Call Origin	Specify a call origin for the report: <ul style="list-style-type: none"> • <i>origination</i>, • <i>termination</i>.
Result Status	Indicate the status of the call for the report: <ul style="list-style-type: none"> • <i>success</i>, • <i>busy</i>, • <i>no channel</i>, • <i>error</i>.
VoIP Gateway	Choose available gateways.
Extras	
Match Clients	Indicate a respective type: <ul style="list-style-type: none"> • <i>matched</i> (identified), • <i>mismatched</i> (not identified).
Match Codes	Choose an appropriate type: <ul style="list-style-type: none"> • <i>matched</i>, • <i>mismatched</i>.
Duration	Select the continuance of the call: <ul style="list-style-type: none"> • <i>zero</i>, • <i>non-zero</i> (i.e.calls, that have a duration equal to or more than 1 second).
Output	This form contains settings of the output data of the report.
Code Deck	Select a respective code deck for the report from the drop-down menu. If you do not select it , code decks assigned to each pulled client or rate table will be in use. If you select it , all code names will be rewritten according to the names from the selected code deck. And all data will be unified by code names.

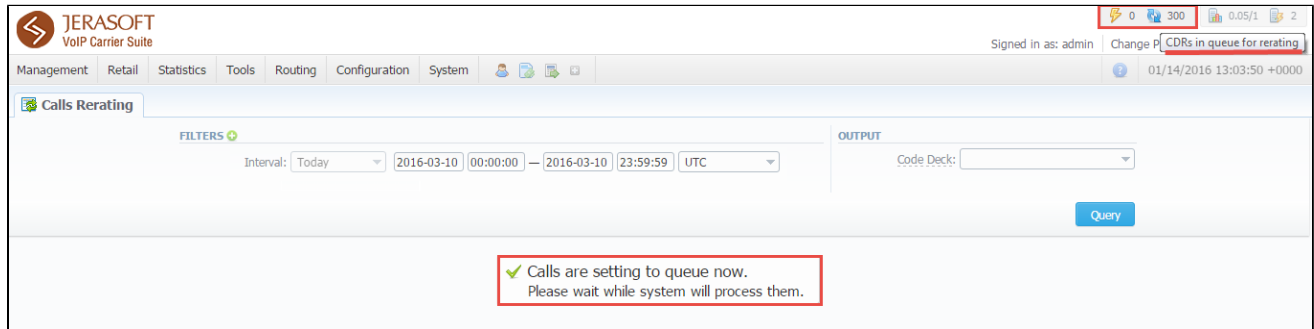
2. Then you will see a respective notification and you need to approve the process by clicking “*Confirm Rerating*” button.


Screenshot: *Calls Rerating section/ approval notification*



3. Finally, the calls will be in the rerating process and you need to wait for the system procedure be completed. The respective number of calls for the rerating you can see on the toolbar at the top of the page.

Screenshot: Calls Rerating section/ approval notification



 The Calls rerating is a time-requiring procedure. It's not recommended to create a rerating query with large chunks of information (for example, rerating 3 million of calls at once).

Knowledge Base Articles

- [How to do rerating?](#)

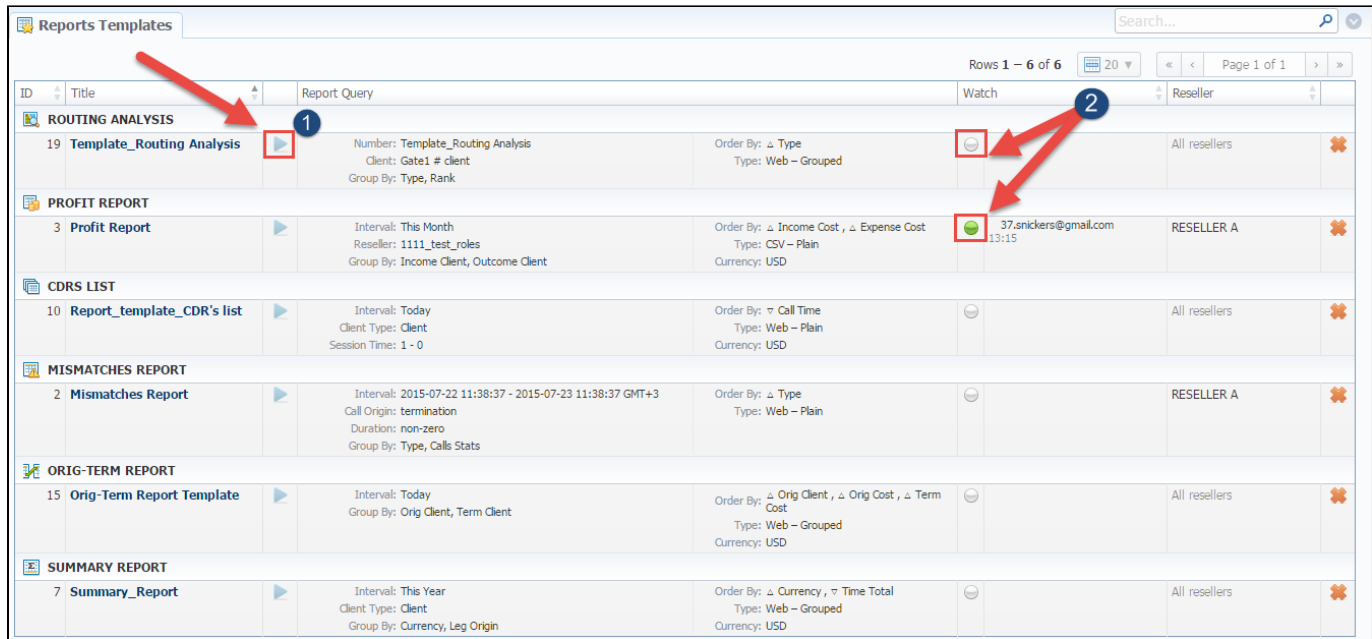
Reports Templates

Reports Templates List


This section allows you to manage already existing templates of *Routing Analysis*, *Profit Report*, *CDR's list*, *Mismatches Report*, *Orig-Term Report*, *Summary report*. And send reports to E-mail to keep yourself informed about the traffic status without the need to login into the system and request reports.

To find it, please go to *Statistics – Reports Templates* section.

Screenshot: Reports Templates section main window



To start managing, choose the respective template from the section and click on the name to open the settings.

1. You can run a report by clicking the **Play icon**. This option is designed to run report template in the browser. It is not intended to send a report via e-mail (see screenshot above).
2. The green Watch icon  shows that the Watch option **"To send a report via e-mail"** is enabled. If the Watch icon is gray, the option is disabled.

Column	Description
ID	Template ID
Title	Name of the template
Report Query	Template details
Watch	Tool to automatically run a report at the exact time and send the results to the list of e-mails.
Reseller	Name of the Reseller

To create a report template

You can create a template while generating report. The following steps will provide step by step directions on how to add a template:

1. Open *Balance/Summary/Orig-Term/Profit report* or *CDR's/ LCR list, Rates/Routing Analysis* section (configuration depends on your demands).
2. Fill in a query form with respective parameters.
3. Click the **"Save Query"** button.
4. Then, a pop-up window with template settings will appear and fill out fields.
5. Click **"Apply"** to save a template.

Screenshot: New Template form

Section	Description
Report	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a Reseller for the report template
	Visibility It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> • Public - available for users according to the settings of the "Reseller" field; • Private - accessible strictly for creator.
Watch	This tool allows to generate reports at the appropriate time and send results to the list of e-mails <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i>. </div>
	Recipients Specify emails of recipients. Here you can indicate your own e-mail or other users, even 3rd parties emails.
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of a week to automatically generate a report. For example, you can run a report only on Monday or each day of week
	Report Query Here you need to specify filters that will be used for generating correct report and choose the output type to view the report

To send a report via E-mail/ Watch feature

You can automatically generate a needed report at a specified time and send the following report to the list of e-mails. To do this, please open a respective template and tick the "Watch" check box. Then fill out next fields:

Field	Description
Recipients	Specify e-mail address where the report should be sent. Here you can specify multiple e-mails. This field is mandatory.
Run Time	Indicate the time when the report should be generated (multiple times could be specified, i.e. 10:00, 12:00).
Days of Week	Mention specific days when the report should be run (i.e. only on Monday or any other day of the week).



Don't forget to specify the e-mail address where the report should be sent to and correctly set report query. After you save query you will be receiving your reports via e-mail in specified time frames.



Please note this option is not available for Web type of the *Output*. To use this option, choose another type (*CSV, Excel XLSx, Excel XLS*).

Screenshot: Reports Templates settings

The screenshot shows the 'Reports Templates settings' interface. At the top, there is a red warning banner that reads 'WATCH (NOT AVAILABLE FOR WEB OUTPUT TYPE)'. Below this, there are input fields for 'Recipients:', 'Run Time:', and 'Days of Week:'. The 'OUTPUT' section is visible, showing a 'Type:' dropdown menu currently set to 'Web'. The dropdown menu is open, displaying the following options: 'Web', 'CSV', 'Excel XLSx', and 'Excel XLS'. A red arrow points to the 'Excel XLS' option. To the right of the 'Type:' dropdown is a 'COLUMNS (10)' dropdown menu set to 'Grouped'.



If you create the report template and the option "**Watch**" is enabled, the client will receive the file with report even when there are no statistics for a specified period.



Please be aware, that the templates previously existing in the "**Reports to e-mail**" section could not be restored automatically. Note, that you can recreate them in the case of need.

Archive Management

On this page

- [Archive Management Section Main Window](#)
- [Active Statistics Packages](#)
- [Archived Statistics Packages](#)
- [Knowledge Base Articles](#)

Archive Management Section Main Window

This section represents an archive of system statistics packages manager. Statistics package is a pack of calls information, created during a respective day. The main window is displayed on screenshot below:

Screenshot: Archive Management section main window

The screenshot displays the 'Archive Management' interface. It features two main tables: 'ACTIVE STATISTICS PACKAGES' and 'ARCHIVED STATISTICS PACKAGES'. The 'ACTIVE' table lists statistics packages by date, showing details like Total Legs, New Legs, Re-Rating Legs, and Progress. The 'ARCHIVED' table lists packages by date and filename, showing their size. A 'Process' button is visible at the bottom right of the interface.

ACTIVE STATISTICS PACKAGES						
Date	Total Legs	New Legs	Re-Rating Legs	Progress		
2016, MARCH (16)	495	0	0	100.00%		
24 March, 2016	0	0	0			
23 March, 2016	12	0	0	100.00%		
22 March, 2016	0	0	0			
21 March, 2016	7	0	0	100.00%		
20 March, 2016	0	0	0			
19 March, 2016	0	0	0			
18 March, 2016	220	0	0	100.00%		
17 March, 2016	246	0	0	100.00%		
16 March, 2016	0	0	0			
15 March, 2016	0	0	0			
14 March, 2016	10	0	0	100.00%		
13 March, 2016	0	0	0			
12 March, 2016	0	0	0			
11 March, 2016	0	0	0			
10 March, 2016	0	0	0			
9 March, 2016	0	0	0			
2015, OCTOBER (1)	0	0	0			

ARCHIVED STATISTICS PACKAGES			
Date	Filename	Size	
2016, MARCH (16)		0.07 MB	
2016, FEBRUARY (29)		0.23 MB	
2016, JANUARY (16)		0.02 MB	
2015, DECEMBER (12)		0.00 MB	

You can download these files from the billing server:
/usr/local/vcs/var/archive

Process








Active Statistics Packages

Active Statistics Packages table houses statistics packages, that are currently present in the database. Statistics packages are grouped underneath a respective month. Click on the icon to view all available packages. *Active Statistics Packages* table columns description:

Column	Description
--------	-------------

Date	System package creation date
Total Legs	Processed call legs quantity: <ul style="list-style-type: none"> • A number of call legs • real call duration • total time of all legs for all calls (summary of origination and termination legs time)
New Legs	Quantity of call legs that have not been processed yet: <ul style="list-style-type: none"> • A number of new call legs • real call duration • time of all legs for all calls (summary of origination and termination legs time)
Re-rating Legs	Quantity of calls queued for re-rating
Progress	Shows overall data processing progress

Active Statistics Packages are managed with 4 check boxes:

Icon	Description
	Updates selected package to latest database format (useful after system update to new version)
	Shows the status of the package: <ul style="list-style-type: none"> • The yellow icon  shows that the package is not archived for the respective day. • The green icon  shows that the package is archived.
	Moves package to archive
	Deletes package from database <i>without</i> performing balance rollback
	Deletes package from database <i>with</i> balance rollback

After "Process" button is clicked, the respective statistics package will be marked for respective operation – to rotate (move), to update, to be cleaned or to be deleted. The operation itself will be executed in the background.


Archived Statistics Packages

Archive Statistics Packages table houses statistics packages that are kept in the archive (/var/archive folder in respect to VCS root).

Archive Statistics Packages table columns description:

Column	Description
Date	System package creation date
Filename	Name of the archive file which contains system package
Size	Size of an archive file

Archive Statistics Packages are managed with 2 checkboxes:

Icon	Description
	Restores system package to database
	Deletes archive file

After “Process” button is clicked, the respective statistics package will be marked for respective operation – to restore or to delete.



Tip: System manages the statistics packages in the background. *Backup&Rotate Manager* system module must be activated to manage the packages!



Tip: Moving or rotating the current day statistics package may result in errors! It is strongly recommended not to do any operations to current day's package.

Knowledge Base Articles

- [How to do one-day statistics re-parsing](#)
- [How to rotate statistics packages?](#)
- [Why statistics is not rotated?](#)
- [How to update statistics package to the format of latest version?](#)
- [How to use Statistics Manager Tool?](#)

Tools

This chapter describes how to manage the rates, active calls, CDR's disputes and provides the information according the factors watcher tool of **the JeraSoft VCS**.

For more details please check the related sections of our Guide:

- [Rates Analysis](#)
- [Rates Generator](#)
- [Active Calls](#)
- [CDR Disputes Manager](#)
- [Factors Watcher](#)

Rates Analysis

On this page:

- [Rates Analysis Form](#)
- [To create a new analysis report](#)
- [To create a new template](#)
- [Export generated report](#)

Rates Analysis Form

Rates Analysis is an advanced feature of the **VCS Rates Management Module**. It allows you to analyze and compare rates within the VCS web interface without the usage of any third-party software.



Screenshot: Rates Analysis section

To create a new analysis report

In order to create an analysis report go to the **Tools** and open the **Rate Analysis section**.

To analyze and compare different rates, select one or few rate tables in the form, specify code names or specific code (you can use «*» sign to specify all), the date for which these rates were actual, desirable output format and click the «Query» button. The system will form a list of rates with prices for each destination. The highest rate available for the destination is colored in red, the lowest – in green, and middle rates are colored in black.

In «Group by» field you can define how you want to sort the resulting data – by codes or code names.

Section	Field Description
Filters	Filters that will be used for generating a respective report. Click plus sign  next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking sign  for deleting.
Outlook	Choose the form of the rate analysis report to display the data. Please note, that this field is mandatory and should be filled out in order to make a report. <ul style="list-style-type: none"> • Rates comparison (compares specified rates of different <i>Resellers</i>). • Least costs list (shows routes with cheaper rates, groups by the price of rate).
Originators	Enter originators for analysis.
Terminators	Indicate terminators to run an analysis report.
Rate Tables	Define rate tables for analysis.
Group By	Select a grouping option, here you can choose and swap columns, change the order. There are following accessible options to group the data in reports: <ul style="list-style-type: none"> • Code (aggregation by default output). • Code Name (grouping by rate rows with the same names and rates for all codes in each rate table). <p>This option is intended to simply grouping option, the system will automatically group data in specified columns.</p>


Additional Filters

There are following accessible additional filters:


- **By calls:** Code, Code Name, Code Country.
- **Extras:** Rate Tables, Originators, Terminators, Actual On, Master Table, Lowest Position, Get Margins For, Rate Group, Rate Age.

Screenshot: Rate Analysis form/ Filters



 Please use the Scroll Bar to see all settings in the pull-down list.


Settings of the calls

Code	Specify a code of needed destination.
Code Name	Define a code name of the desired destination.
Code Country	Enter a code of the respective country.
Extra settings	
Actual on	Define the day and time of the rates.
Master table	Specify a rate table which rates will be compared.  Please note that this field is active only during rate tables analysis.
Lowest Position	Enter the number of the position from the full list of rates. For example, if you are looking for the cheapest destination in the several rates, type 1 in this field. Please note, that this feature only works with "Master table" option.
Rate Group	Indicate a rate group to which this rate belongs.
Get margins for	Define a rate table from which respective margins will be taken. It is used to analyze margins.
Rate age	Specify the number of days.

Output	This form contains settings of the output data of the report.
Type	Choose a format of the report from a drop-down list: Web/CSV/Excel XLS/Excel XLSx.
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.
Code Deck	Select a code deck from a drop-down list. All codes in the following report will be presented according to the specified code deck. Select a code deck to pull code names from

"Simulate long codes" check box

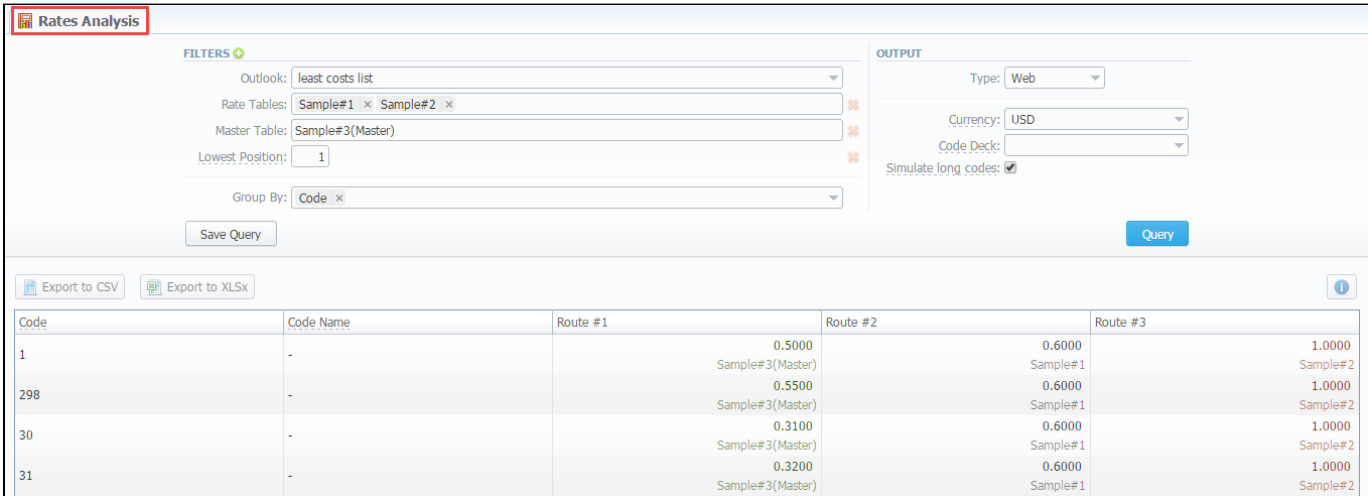
Check if a rate table does not have codes which are presented in other tables for simulating them using shorter codes.

 If you check the «*simulate long codes*» check box, the system will try to simulate the longest available code with shorter one.

For example, we analyze two rate tables, one of which has code 380, and the other has 380 and 38044 codes.

When mentioned check box is active, the first rate table will have unavailable 38044 code simulated with the price of available 380. Rates such as these have «*Simulated*» label when you hover the mouse pointer over them and are colored in light-red, light-green and grey respectively.

Screenshot: Rates Analysis section

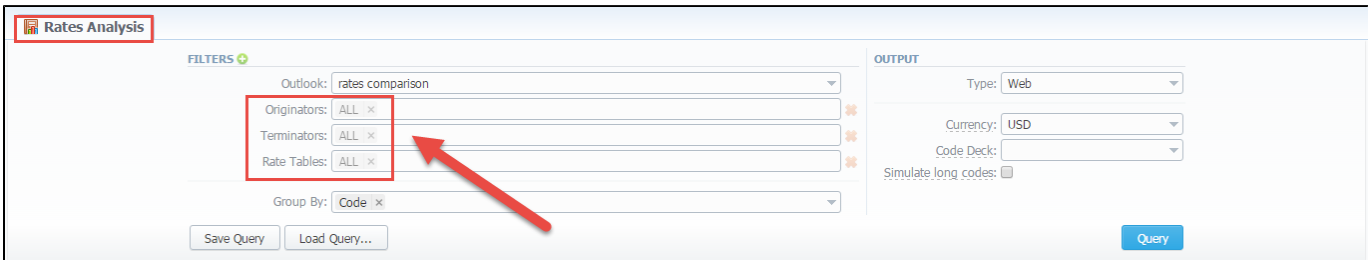


The screenshot shows the 'Rates Analysis' interface. The 'FILTERS' section includes: Outlook: least costs list; Rate Tables: Sample#1 x Sample#2 x; Master Table: Sample#3(Master); Lowest Position: 1; Group By: Code x. The 'OUTPUT' section includes: Type: Web; Currency: USD; Code Deck: ; Simulate long codes: . Below the filters are 'Export to CSV' and 'Export to XLSx' buttons. The main table displays data for codes 1, 298, 30, and 31 across three routes, with values for Sample#1 and Sample#2.

Code	Code Name	Route #1	Route #2	Route #3
1	-	0.5000 Sample#3(Master)	0.6000 Sample#1	1.0000 Sample#2
298	-	0.5500 Sample#3(Master)	0.6000 Sample#1	1.0000 Sample#2
30	-	0.3100 Sample#3(Master)	0.6000 Sample#1	1.0000 Sample#2
31	-	0.3200 Sample#3(Master)	0.6000 Sample#1	1.0000 Sample#2

Also, there is a possibility to **select all** values in the **Rates Analysis form** for next filter fields: *Rate tables, Originators, Terminators*.

Screenshot: Rates Analysis section



The screenshot shows the 'Rates Analysis' interface with the 'FILTERS' section. The 'Originators', 'Terminators', and 'Rate Tables' fields are highlighted with a red box and have 'ALL x' selected. A red arrow points to the 'ALL x' selection in the 'Rate Tables' field. The 'Outlook' is set to 'rates comparison' and 'Group By' is 'Code x'. The 'OUTPUT' section is the same as in the previous screenshot.

To create a new template

Also, you can create a template and save specified parameters by clicking "**Save Query**" button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Template form

Reports Templates
 WATCH

Title:

Reseller:

Visibility:

Recipients:

Run Time:

Days of Week:

REPORT QUERY

FILTERS

Period 1: —

Compare Period 2: —

Group By:

OUTPUT COLUMNS (18)

Order By:

Limit:

Type:

Currency:

Code Deck:

Section	Description						
Rates Analysis	Here you can specify parameters for the template that will be used while running reports						
	<table border="1" style="width: 100%;"> <tr> <td style="width: 15%;">Title</td> <td>Specify a name of the template</td> </tr> <tr> <td>Reseller</td> <td>Indicate a Reseller for the report template</td> </tr> <tr> <td>Visibility</td> <td> It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> Public - available for users according to the settings of the "Reseller" field. Private - accessible strictly for creator. </td> </tr> </table>	Title	Specify a name of the template	Reseller	Indicate a Reseller for the report template	Visibility	It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> Public - available for users according to the settings of the "Reseller" field. Private - accessible strictly for creator.
	Title	Specify a name of the template					
Reseller	Indicate a Reseller for the report template						
Visibility	It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> Public - available for users according to the settings of the "Reseller" field. Private - accessible strictly for creator. 						
Watch	This tool allows to automatically generate the report at the appropriate time and send the results to the list of e-mails <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i>. </div> <table border="1" style="width: 100%;"> <tr> <td style="width: 15%;">Recipients</td> <td>Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties</td> </tr> <tr> <td>Run Time</td> <td>Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"</td> </tr> <tr> <td>Days of Week</td> <td>Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of the week.</td> </tr> </table>	Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties	Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"	Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of the week.
Recipients	Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties						
Run Time	Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"						
Days of Week	Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of the week.						
Report Query	Here you need to check filters and the output type. These values will be pre-selected by default according to the formed rate analysis query.						

Export generated report

You can export data in CSV or XLSx file that contains only currently presented data, no automatic request to update data while exporting.

To download a .csv file, click the "Export to CSV" button on the toolbar.

To download a .xlsx file, click the "Export to XLSx" button on the toolbar.

Please note, that you can check an **actual date interval** of the report by clicking the icon and it could be different from the Interval specified above if there is no date for the period.

Rates Generator

On this page

- [Adding New Rates Generator Query](#)
- [Setting Additional Options](#)
 - [Optimization Options](#)
 - [Adjust Options](#)
 - [Advanced Options](#)
 - [Quality Options](#)
- [Adding New Rule](#)
- [Adding Source to the Rule](#)

Adding New Rates Generator Query

Rates Generator is a useful tool for creating a price list from data that is taken from multiple sources, such as another rate sheets or your provider's rate tables.

The price list is created by running a set of code rules that are stored in a preset. To create new preset, go to *Tools – Rates Generator* section and click the «*New Rates Generator*» button. Set a name and a reseller for the preset and lick «*OK*». Also, you can set additional parameters in current window or by clicking on a name of your new preset and going to the "*Parameters*" section tab:

Screenshot: *Rates Generator* section

Field	Description
Name	Specify the name of new rates generator
Reseller	Specify the reseller to whom newly created rates generator should belong
Code Deck	Select the code deck that will be used to search for codes in source and name destination codes in new price list
Currency	Specify the currency of rates in new price list
Description	Additional information about current rates generator

Setting Additional Options

To refine your results, you can use following additional criteria. These additional options are also presented in the "*New Rates Generator*" window or in the "*Parameters*" section tab and you can do the following:

Optimization Options

Screenshot: Rates Generator section/Optimization options

Section	Description
Simple Optimization	Applies the same price for all codes inside same code name by using three options
	<ul style="list-style-type: none"> • <i>min</i>: minimal available price
	<ul style="list-style-type: none"> • <i>max</i>: maximal available price
Vertical Optimization	Enables merging of longer codes into shorter ones if respective rates satisfy <i>Target < Parent</i> and <i>Target > Parent</i> settings
	<p>Target < Parent</p> <p>If current price of the rate which currently is being analyzed for optimization with it's parent (shorter code for vertical and same length code with most frequency of the same price for horizontal) is less for entered percent or less, then it will be optimized</p>
	<p>Target > Parent</p> <p>If current price of the rate which currently is being analyzed for optimization with it's parent (shorter code for vertical and same length code for horizontal) is more for entered percent or more, then it will be optimized</p>
Horizontal Optimization	Enables application of the same rate to codes of same lengths, which belong to the same code name if respective rates satisfy <i>Target < Parent</i> and <i>Target > Parent</i> settings
	<p>Target < Parent</p> <p>If current price of the rate which currently is being analyzed for optimization with it's parent (shorter code for vertical and same length code with most frequency of the same price for horizontal) is less for entered percent or less, then it will be optimized</p>
	<p>Target > Parent</p> <p>If current price of the rate which currently is being analyzed for optimization with it's parent (shorter code for vertical and same length code for horizontal) is more for entered percent or more, then it will be optimized</p>

Adjust Options

"Adjust Results" check box enables results adjusting by data from currently selected *Code Deck*. For example, if your rules provided you with codes 380 and 38050, but your code deck has only code 38050 recorded, only that 38050 will get into resulting price list.

Screenshot: Rates Generator section/ Adjust Results option

Rates Generator

Name:

Reseller:

Code deck:

Currency:

Description:

SIMPLE OPTIMIZATION
Mode:

VERTICAL OPTIMIZATION
Target < parent: %
Target > parent: %

HORIZONTAL OPTIMIZATION
Target < parent: %
Target > parent: %

ADJUST RESULTS
Rate:
Setup Fee:
Min Time: sec
Interval: sec
Grace Time: sec
Time Profile:

ADVANCED OPTIONS
Detect fake:
Skip distance: %
Rate position:

QUALITY OPTIONS
Analyze period: hours
Code min time: min
Unmatched price:

Field	Description
Rate	Define a rate for codes which are present in code deck but were not provided by your rules, when performing <i>Adjust results</i>
Setup Fee	Define setup fee for those rates
Min Time	Define minimum time for those rates
Interval	Define interval for those rates
Grace Time	Define grace time for those rates
Time Profile	Define time profile for those rates

Advanced Options

Screenshot: Rates Generator Advanced Options

Rates Generator

Name:

Reseller:

Code deck:

Currency:

Description:

SIMPLE OPTIMIZATION
Mode:

VERTICAL OPTIMIZATION
Target < parent: %
Target > parent: %

HORIZONTAL OPTIMIZATION
Target < parent: %
Target > parent: %

ADJUST RESULTS
Rate:
Setup Fee:
Min Time: sec
Interval: sec
Grace Time: sec
Time Profile:

ADVANCED OPTIONS
Detect fake:
Skip distance: %
Rate position:

QUALITY OPTIONS
Analyze period: hours
Code min time: min
Unmatched price:

Section	Description
Detect fake	Enable detection of fake rates if at least specified number of rates is present. The mechanism is following: if you enter "3" and your rules provided you with 3 different rates for some destination, the cheapest rate will be compared to the direct average of those 3 rates. If the difference is more, than provided in <i>Skip distance</i> , then rate is considered fake and removed from result
Skip distance	A percentage value of difference between current rate and direct average when performing <i>Detect fake</i>
Rate position	Define what cheapest rate of all to provide as a result (for example, if you enter "1" – system will take the cheapest rate if "2" – second cheapest etc.)

Quality Options

Screenshot: Rates Generator Quality Options

Section	Description
Analyze period	Define a number of hours to analyze for picking ACD and ASR quality
Code min time	Define a number of minutes that should be available for each code that satisfies quality parameters
Unmatched price	Define price for all codes which do not satisfy quality parameters

Adding New Rule

After clicking "OK" button, you will go to a new window. By clicking here on "Add rule" button you will go to a new pop-up window, where you can set one rule to be added to the query. Here is what you can specify in rule's settings (Screenshot):

Screenshot: Add new Rates Generator window

Rates Generator
new1

RATES FILTER

Code:

Code Name:

Time Profile:

Rate Group

QUALITY FILTER

ASR: — %

ACD: — min

FORCE RATES SETTINGS

Min Time: sec

Interval: sec

Grace Time: sec

Setup Fee: USD

Time Profile:

SOURCES

Rate Tables:

Terminators:


MARGINS +

i No Margins added yet

Section	Fields And Description
Rates Filter	Set basic parameters of your rule here
	<ul style="list-style-type: none"> • Code Pick a code for current rule
	<ul style="list-style-type: none"> • Code Name Pick group of codes for current rule
	<ul style="list-style-type: none"> • Time Profile Select a time profile for codes that will be picked from sources
Quality Filter	Set quality parameters of your rule here
	<ul style="list-style-type: none"> • ASR, % Specify ASR ranges that should be used when picking destinations from sources • ACD, min Specify ACD ranges that should be used when picking destinations from sources
Force Rates Settings	Specify additional parameters that should be noted when picking destinations from sources (<i>Setup Fee, Min. Time, Interval, Grace Time, etc.</i>)
Sources	Select one or multiple sources for picking data for new price list
	<ul style="list-style-type: none"> • Rate Tables Specify the rate tables for calls of defined account group

	<ul style="list-style-type: none"> • Terminators 	Specify a vendor or specific vendor account for whom this routing rule will work
Margins	Specify ranges of rates that should be picked from sources and apply respective margins	

Working with this tool is really simple – specify your Filters, select a source, specify code and margins and when you click «OK», your selections will be added as a new rule to the template. By adding multiple rules you can create a price list that you currently require (for example, pick one destination from *Provider A*, another one – from *Provider B*, and rest of destinations from all remaining providers). To generate a resulting price list, click on «Generate» button.

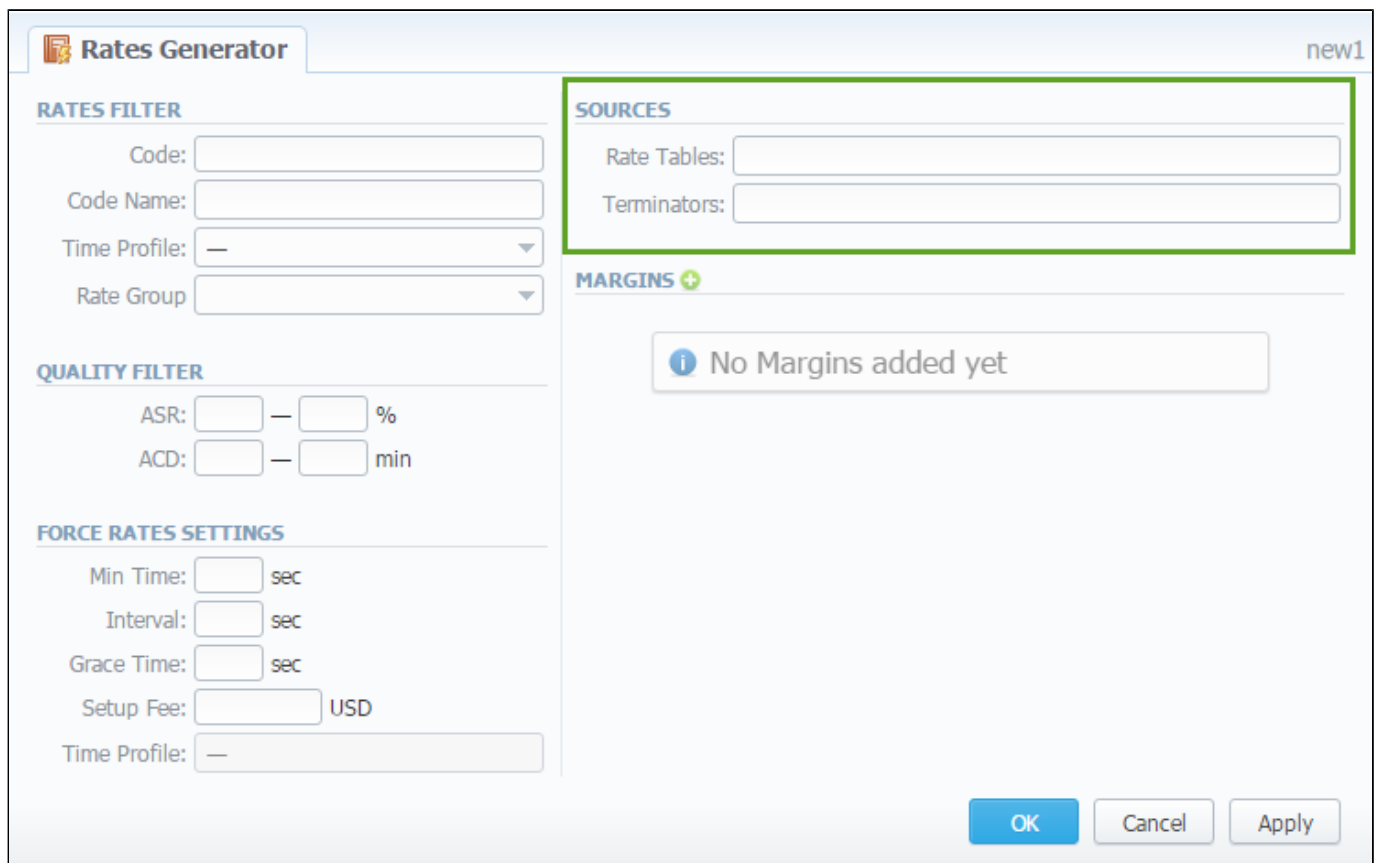
 **Tip:** Please note that rules abide following priority: top placed rule is picked first and if some of the lower priority rules are able to provide same codes, those codes will be ignored.

 **Tip:** You can drag rules to change the priority.

Adding Source to the Rule

For specifying a source in Rate Generator's Rule, during adding or editing the Rule, simply click on green plus sign in "Sources" section, hereinafter specify the kind of source you need from drop-down list, i.e. "Terminators" or "Rate Tables", and start typing the name of terminator or rate table respectively in the field (Screenshots below):

Screenshot: Adding Source to the rule



The screenshot shows the 'Rates Generator' window with the 'SOURCES' section highlighted by a green border. The window title is 'new1'. The interface is divided into several sections:

- RATES FILTER:** Includes input fields for 'Code', 'Code Name', and 'Rate Group', and a dropdown for 'Time Profile'.
- QUALITY FILTER:** Includes input fields for 'ASR' (with a percentage sign) and 'ACD' (with a 'min' label).
- FORCE RATES SETTINGS:** Includes input fields for 'Min Time', 'Interval', 'Grace Time', and 'Setup Fee' (with a 'USD' label), and a dropdown for 'Time Profile'.
- SOURCES:** This section is highlighted with a green box and contains two input fields: 'Rate Tables' and 'Terminators'.
- MARGINS:** This section has a green plus icon and a message box that says 'No Margins added yet'.

At the bottom right, there are three buttons: 'OK', 'Cancel', and 'Apply'.



If you want to use Quality Options for Rates Generator, you have to define a Terminator as a Source for Rates Generator's rule.



Tip: Taking Terminator as a Source instead of its termination Rates Table gives the possibility to use recently changed table automatically for Terminator as a whole.



Please note that Rates Generator creates rates in "*unconfirmed*" status. It means that you need to check newly created rates and confirm them by going to *Rates Table section*.

Active Calls

On this page:

- [Active Calls Search Form](#)
- [To create active calls report](#)
- [To create a query template](#)
- [Active Calls toolbar: reload, export, chart.](#)
- [Knowledge Base Articles](#)

Active Calls Search Form

This section provides an easy and convenient active call monitoring tool. Upon access, you can see the full list of active calls that are currently being processed by your switch.

Also, you can filter the list of calls by *orig and term client / account/ serial/ code name / code* and *VoIP gateway*.

Screenshot: Active Calls section

This section is only for reference. It displays current active calls but does not affect the billing or statistics processing.

Active Calls

FILTERS

Group By: VoIP Gateway

Save Query Load Query...

OUTPUT COLUMNS (?)

Order By: Duration

Limit: No limit

Type: Web Grouped

Query

No active calls found

Please note, that this function requires **RADIUS Accounting Start packets** to be sent from your VoIP Gateway and **"Track Active Calls"** option enabled in VoIP Gateways section.
Important! **"Track Active Calls"** option **diminishes system performance**, activate it only if you use capacity control by billing and/or require active calls status monitoring.

Here you could see an example of just how simple report of active calls would look like:

Screenshot: Active Calls section

This section is only for reference. It displays current active calls but does not affect the billing or statistics processing.

Active Calls

FILTERS

Group By: VoIP Gateway

Save Query

OUTPUT COLUMNS (?)

Order By: Duration

Limit: No limit

Type: Web Plain

Query

Reload options Export to CSV Export to XLSx Show Chart

VoIP Gateway	Total Calls	Info	Originator	Terminator	SRC Number	DST Number	Duration
3.10	8						
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			00:32
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			00:32
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			00:33
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			00:33
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			06:10
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			06:11
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			06:21
3.10			Ring_orig / A_ORIG / 12.12.0.0	Unknown			06:23



If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the plus or minus signs.

To create active calls report

In order to create a report go to the **Tools** and open the **"Active Calls"** section. Then you need to fill out the query form with next parameters:

Section	Field Description
---------	-------------------


Filters Filters that will be used for generating a correct report.

Click plus sign  next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking sign  for deleting.

Group By Select a grouping option, here you can choose and swap columns, change the order. There are following accessible options:

- **Orig Client/ Account/ Code/ Code Name/ Serial.**
- **Term Client/ Account/ Code/ Code Name.**
- **VoIP Gateway.**

This addition is intended to simply grouping option, now the system will automatically group data in specified columns.

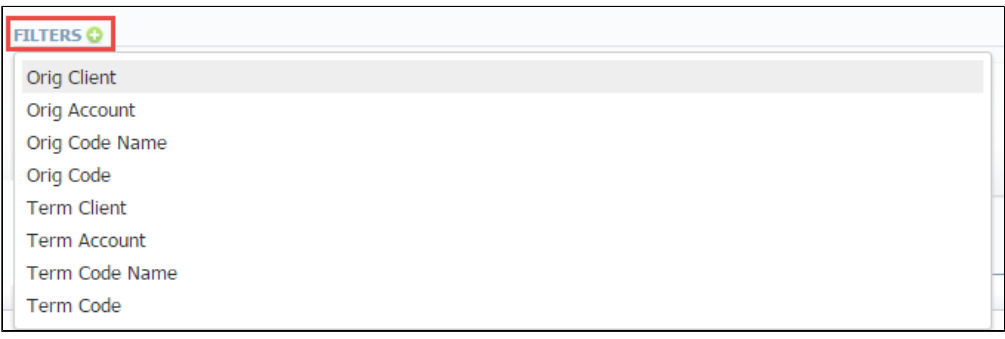
 Please use the Scroll Bar to see all settings in the pull-down list.

Additional Filters

There are following accessible additional filters:

- **Orig Client/ Account/ Code/ Code Name.**
- **Term Client/ Account/ Code/ Code Name.**

Screenshot: Active Calls search form/ Filters




Origination Settings of Clients

Orig Client	Define an origination client for the report
Orig Account	Enter an orig account for the report
Orig Code	Specify an orig code for the report
Orig Code Name	Indicate an orig code name

Termination Settings of Clients

Term Client	Define a termination client for the report
Term Account	Enter a term account for the report
Term Code	Specify a term code for the report
Term Code Name	Indicate a term code name

Output This form contains settings of the output data of the report.

Click the plus sign  near the "Columns" to select respective columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report

There are following columns to add in the report: *Total Calls, Info, Originator, Terminator, SRC Number, DST Number, Duration.*

Screenshot: Active Calls search form/ Columns

FILTERS	
Total Calls × Info × Originator × Terminator × SRC Number × DST Number × Duration ×	
Total Calls	Quantity of calls in the database, total calls quantity.
Info	Click a respective icon in this column and you could see an additional data about calls: <i>SRC and DST numbers, code and code name, call ID, conf ID, setup time and VoIP gateways, etc.</i>
Originator	The name of the originator, orig gateway, account IP, Name or ANI.
Terminator	The name of the terminator, term gateway, account IP, Name or ANI.
SRC Number	The source number.
DST Number	The destination number.
Duration	The continuance of the call, specified in seconds.
Other output settings	
Order By	Select parameters to sort already grouped data in columns. Here you can sort data from highest to lowest values (or vice versa).
Type	Choose a format of the report from a drop-down list: Web/CSV/Excel XLS/Excel XLSx . Also, select next to the "Type" field a table view: <ul style="list-style-type: none"> • <i>Plain</i> - a simple table view • <i>Grouped</i> - a table view with grouped data and possibility to collapse it <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web</i> formats, it doesn't work with other formats. </div>
Limit	Determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen parameters.
Send to	You can send generated reports via e-mail. For example, it is useful when it takes a lot of time to run a report. Also, it is possible to specify several e-mails. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> This feature is available only for CSV/Excel XLS/Excel XLSx formats of the report, it doesn't work with Web. </div>

To create a query template

Also, you can create a template for reports and save specified parameters by clicking "**Save Query**" button in the form. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Query Template form

Reports Templates

ACTIVE CALLS

Title:

Reseller:

WATCH

Recipients:

Run Time:

Days of Week:

REPORT QUERY


FILTERS

Group By:

OUTPUT COLUMNS (7)

Order By:

Type:


Section	Description
Active Calls	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate the Reseller for the template
Watch	This tool allows to automatically generate reports at the appropriate time and send the results to the list of e-mails
	 Please note, that this tool is not available for Web output type , only for <i>CSV/Excel XLS/Excel XLSx</i> .
	Recipients Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Indicate days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week
Report Query	Here the system automatically saves already specified search parameters. You can edit these values for generating correct report and modify the output type to view the report


To load already existed templates while generating statistic reports, click "**Load Query**" button in the *Active Calls section*.


Active Calls toolbar: reload, export, chart.

You can reload the interval, export data to a CSV and XLSx file which contains only currently presented data, **no automatic request to update data while exporting**. Also, it is possible to create charts for easily illustrating a crucial information. And you can generate a report using the same criteria in the *Orig-Term report* and the *CDRs list* sections.


1. You can refresh the already generated active calls report. The allowed period is 10, 30, 60 seconds. In order to refresh the interval click the respective button "**Reload options**" on the toolbar and choose a needed value for the "**Interval**" from the drop-down list, as it's pointed out in the screenshot "Active Calls form".

 Also you may indicate an additional interval for which the system displays active calls statistics. In order to do this, specify the time parameter in the "**Show last**" field. For example, if you want to display the data for 1 day, click the "**Reload options**" button and set the period *1440 min* in the "**Show last**" field.

2. To download a report in .csv, click the "**Export to CSV**"  button on the toolbar.

 Please note, this button will be visible only when the "**Type**" of the output is "**Plain**". For the "**Grouped**" output type it is not available.

3. To download a .xlsx file, click the "**Export to XLSx**"  button on the toolbar.

4. To create a visual chart, click the "**Show Chart**"  button on the toolbar. There is more information available on this topic in the article "How to create a statistic chart?" at our Knowledge Base.

Screenshot: *Active Calls form*

Active Calls This section is only for reference. It displays current active calls but does not affect the billing or statistics processing.

FILTERS

Group By: VoIP Gateway × Orig Account × Orig Client ×

Save Query Load Query...

OUTPUT COLUMNS (7)

Order By: Duration Δ ×

Limit: No limit

Type: Web Grouped Query

Reload Interval 2 Export to CSV Export to XLSx 4 Show Chart

VoIP Gateway	Orig Account	Orig Client	Info	Total Calls	Originator	Terminator	SRC Number	DST Number	Duration
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:40
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:40
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:40
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:40
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:40
GW1	o11	ori_1	⚠		ori_1 / o11 / 11.11.11.11	Unknown	21	4531	0:03:41



If you want to properly create a **Line chart** for **different clients**, please follow these steps:

- choose the "Orig Client" parameter in the "Group By" field.
 - click the "Show Chart" button and open the chart settings.
 - select "Date" and "Time" parameters on Axis X, "Calls Total" parameter on Axis Y.
 - then specify a *line type* of the chart and click the "Save" button.

Knowledge Base Articles

- [Why there are no active sessions?](#)

CDR Disputes Manager

On this page

- [CDR Disputes List](#)
- [Creating New Dispute](#)
 - [Step 1. Selecting File and Specifying All Required Parameters](#)
 - [Step 2. Recognizing The File](#)
 - [Step 3. Receiving Results of comparison](#)
- [Mass Edit Button](#)

CDR Disputes List

CDR Disputes Manager is full-featured add-on of the system, which allows you to make comparison of:

- CDRs that is given by your client/vendor with ones stored in the system;
- CDRs that is taken right away from the switch with the CDRs stored in the system.

Screenshot: *CDR Disputes List*

ID	Client / Account	Period	Total Qty	No L	No E	Updated	
11	ASIA ORIG CLIENT / all accounts	02/17/2016 – 03/02/2016 UTC	110170		1	0	03/02/2016 10:59:54 +0000
10	ASIA ORIG CLIENT / all accounts	02/17/2016 – 03/02/2016 UTC	110269		0	0	03/02/2016 10:58:44 +0000
9	ASIA ORIG CLIENT / all accounts	02/17/2016 – 03/02/2016 UTC	2962	1481	1481	0	03/02/2016 10:57:28 +0000
8	ASIA ORIG CLIENT / all accounts	03/02/2016 – 03/02/2016 UTC	2196	1098	1098	0	03/02/2016 10:55:07 +0000
6	ASIA ORIG CLIENT / all accounts	02/09/2016 – 02/09/2016 UTC	22	3	0	0	02/09/2016 11:53:55 +0000
5	ASIA ORIG CLIENT / all accounts	02/09/2016 – 02/09/2016 UTC	22	3	0	0	02/09/2016 11:15:51 +0000
4	ASIA ORIG CLIENT / all accounts	02/09/2016 – 02/09/2016 UTC	22	3	0	0	02/09/2016 11:14:30 +0000
3	ASIA ORIG CLIENT / all accounts	02/09/2016 – 02/09/2016 UTC	22	2	0	0	02/09/2016 11:09:19 +0000
1	ASIA ORIG CLIENT / all accounts	02/09/2016 – 02/09/2016 UTC	22	0	0	0	02/09/2016 11:00:51 +0000

Column	Description
ID	ID of a dispute
Client/Account	Client and its accounts of a current dispute
Period	Period of compared CDR files
Total Qty	Total amount of compared CDRs
No L	Number of CDRs which were not found in the system
No E	Number of CDRs which were not found in the external CDR file
Updated	Date of the last dispute update

Icon	Description
	Is used to open a dispute details window
	Is used to delete a dispute from the system



If *CDRs Disputes Manager* is not displayed in *Tools* section, you need to enable it in *System Roles* section.

Creating New Dispute

Whole creating dispute process logically divided into three steps.

Step 1. Selecting File and Specifying All Required Parameters

To create a new dispute press "Add New Dispute" button. You need to specify the next information in the pop-up window:

Screenshot: Adding New Dispute. Step 1

Field	Description
Client	Specify a client for the dispute
Account	Specify an account for the dispute
Type	Choose the type of compared CDRs: <ul style="list-style-type: none"> • origination • termination
Code Name	Specify code name of the desired destination for comparison
Code	Specify code of the desired destination for comparison
Code Deck	Select a code deck that should be used for the current dispute
Select File	Upload the CDR file for comparison
Date Format	Specify date format of CDRs <div style="border: 1px solid yellow; padding: 5px; margin-top: 10px;"> Please note that by default date format is set "auto" which has the following format YYYY-MM-DD HH:MM:SS. </div>
Period	Specify a period of a dispute
"Override timezone" checkbox	If enabled, the timezone in the importing file will be replaced with the specified timezone in the "Period" section

When you filled in all required fields press "Process>>" button.

CDR Disputes have developed optimization algorithms of the file uploading process. Hence, we strongly recommend uploading files with a limited number of columns. **The dispute file should contain only 6 columns** for correct auto-detection while importing.

Step 2. Recognizing The File


The system will recognize the file, and display few first rows of it. Note that comparison of CDRs can be made only by the following parameters: SRC Number, DST Number, Session Time, Connect Time, Disconnect Time, so if there's a need, make changes to the recognition of data and press "Process>>" again (Screenshot).

Screenshot: New dispute creation. Step 2

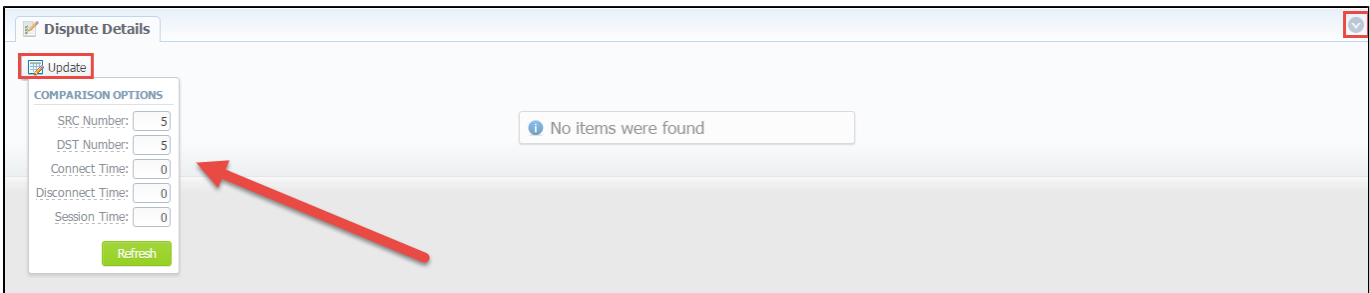
Import						
ROWS AND COLUMNS SELECT						
SRC Number	DST Number	Session Time	Connect Time	Disconnect Time	Skip	
Src Number	Dst Number	Session Time	Connect Time	Disc Time	<input type="checkbox"/>	
38050	38050112233	25	08/10/2014 18:34:16 +0000	08/10/2014 18:34:41 +0000	<input type="checkbox"/>	
38050	38050112233	21	08/10/2014 18:31:31 +0000	08/10/2014 18:31:52 +0000	<input type="checkbox"/>	
38050	38050112233	68	08/10/2014 18:29:28 +0000	08/10/2014 18:30:36 +0000	<input type="checkbox"/>	
38050	38050112233	63	08/10/2014 17:30:15 +0000	08/10/2014 17:31:18 +0000	<input type="checkbox"/>	
38050	38050112233	30	08/10/2014 17:30:28 +0000	08/10/2014 17:30:58 +0000	<input type="checkbox"/>	
38050	38050112233	5	08/10/2014 17:30:34 +0000	08/10/2014 17:30:39 +0000	<input type="checkbox"/>	
380509595465	380504523212	109	08/10/2014 15:39:53 +0000	08/10/2014 15:41:42 +0000	<input type="checkbox"/>	
380509595465	380504523212	6	08/10/2014 15:38:22 +0000	08/10/2014 15:38:28 +0000	<input type="checkbox"/>	

Step 3. Receiving Results of comparison

After you click the "Process>>", the system will process the comparison and "Dispute Details" window will be opened, where you need to click on "Update" button and specify Compare Options in respective pop-up window, then click on "Refresh" button for showing the disputes' results (Screenshots below).

Click the down arrow  on the top on the page to quickly search disputes.

Screenshot: Disputes Details window. Step 3




Field	Description
SRC Number	Enter number of the last digits for source number comparison
DST Number	Set number of the last digits for destination number comparison
Connect Time	Specify possible time offset (in seconds) between the system and external CDRs
Disconnect Time	Define possible time offset (in seconds) between the system and external CDRs
Session Time	Specify possible time offset (in seconds) between the system and external CDRs

Screenshot: Disputes Details window. Step 3

Dispute Details						
Update						
Rows 1 – 20 of 10856 Pages: 543 1 2 3 4 5						
	SRC Number	DST Number	Connect Time	Disconnect Time	Session Time	
L	No matched CDRs					
E	380509595123	380671240103	2014-09-24 16:41:36+00	2014-09-24 16:42:14+00	38	
L	No matched CDRs					
E	380509595923	380671240103	2014-09-24 16:41:40+00	2014-09-24 16:42:14+00	34	
L	380509595123	380671240103	2014-09-24 16:41:40+00	2014-09-24 16:42:14+00	34	
E	380509595123	380671240103	2014-09-24 16:41:40+00	2014-09-24 16:42:16+00	36	
L	380509595123	380671240103	2014-09-24 16:44:02+00	2014-09-24 16:44:28+00	26	
E	No matched CDRs					
L	380631224578	380687892315	2014-09-24 16:44:03+00	2014-09-24 16:44:39+00	36	
E	380631224578	380687892315	2014-09-24 16:44:03+00	2014-09-24 16:44:39+00	36	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:33+00	2014-10-01 11:19:33+00	120	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:33+00	2014-10-01 11:19:33+00	120	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:33+00	2014-10-01 11:19:33+00	120	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:34+00	2014-10-01 11:19:32+00	118	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:34+00	2014-10-01 11:19:32+00	118	
L	No matched CDRs					
E	380662569874	380502992345	2014-10-01 11:17:34+00	2014-10-01 11:19:34+00	120	

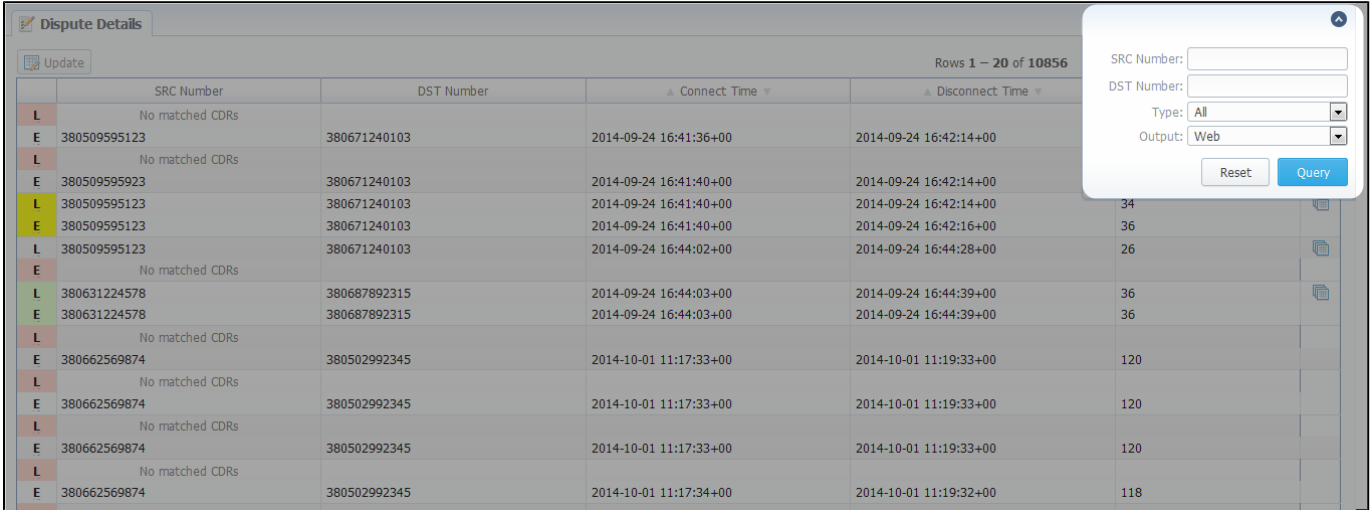
Icon	Description
E	Red color indicates the mismatched CDRs (external or local, it depends on the marked letter L or E)
L	Yellow color indicates the matched CDRs with offset (external or local, it depends on the marked letter L or E)
L	Green color indicates the exact matched CDRs (external or local, it depends on the marked letter L or E).

 Please note, if at least one of the CDR's comparison parameters (*Session Time/Connect Time* or *Session Time/Disconnect Time*) matches to the range of values specified in the "Update" option, it will be indicated as exact matched CDRs (green color).

Also, you can change the results mode using special search form (Screenshot below).

Here you can set exact *DST Number* or *SRC Number* for showing results only for that number, also, filtration can be made by *Type* of compared records, and results can be also saved in .csv format using *Output* field. For applying the made changes click the "Query" button, and if you want to clear the specified settings click the "Reset" button.

Screenshot: Dispute Details window. Search form



Mass Edit Button

You may change the status of a group of disputes by using "Mass Edit" button (Screenshot). In the following window you can specify the status of selected disputes in respective "Status" field, then click the "Process" button and all changes will be applied.

Screenshot: Mass Edit button

The screenshot shows a web application interface for managing CDRs Disputes. At the top left, there is a search bar and a 'Mass Edit' button. Below this is a table with columns: ID, Name, Status, Account, Period, GMT+3, Total Qty, No L, No E, and Updated. A dialog box is open over the table, showing a 'Status' dropdown menu with 'In Proce' selected and a 'Process' button. The table contains 5 rows of data.

ID	Name	Status	Account	Period	GMT+3	Total Qty	No L	No E	Updated
26	Alex S	In Proce		10/06/2014 - 10/06/2014	GMT+3	7	7	0	06/08/2014 13:30:02 +0300
16	Alex S			10/06/2014 - 10/06/2014	GMT+3	7	7	0	29/07/2014 16:59:06 +0300
17	rework terminator / all accounts			12/04/2014 - 01/07/2014	GMT+3	7414	7414	55	15/07/2014 15:18:01 +0300
14	Alex Silver / all accounts			10/06/2014 - 10/06/2014	GMT+3	7	7	0	15/07/2014 15:03:56 +0300
12	rework originator / all accounts			10/06/2014 - 29/06/2014	GMT+3	54	54	0	15/07/2014 14:15:32 +0300

Factors Watcher

On this page

- [Factors Watcher List](#)
- [Creating New Query](#)
- [Configuring Watcher Rules](#)

Factors Watcher List

This section represents built-in monitoring tool, that watches over different parameters and generates alerts if some conditions are met.

Screenshot: Factors Watcher section main window

ID	Name	Watch Rules	Presets	Query
50	Factors Watcher 1 Analyze by: Summary report Check time: 1 minute(s) / 30 minute(s) Last check on 05/20/2016 11:00:13 +0000	1	0	Client: Client A Code Name: - Group By: Client, VoIP Gateway, Code Company: AutoTest_Company Code: - VoIP Gateway: -
49	Factors Watcher example Analyze by: Summary report Check time: 30 minute(s) / 30 minute(s) No check has been made yet	0	0	Client: - Code Name: - Group By: Account, Code Company: - Code: 93 VoIP Gateway: -

Creating New Query

The tool workout is based on periodical queries of statistic information. To create a new query click the “New Factors Watcher” button. You need to specify next parameters in the following form:

Screenshot: Adding new Factors Watcher query

Factors Watcher

Name: Factors Watcher 1
 Analyze by: Summary Report
 Report Template: [dropdown]

Analyze interval of: 30 minute(s)
 Check every: 30 minute(s)
 Period Start: [empty]
 Time Zone: UTC
 Period Offset: [empty] minute(s)
 Time Profile: all time

QUERY

Client: Orig_o_client
 Code Name: Denmark-cellular
 Company: Company Name
 Group By #1: Client

Account: [empty]
 Code: [empty]
 Code Deck: Pre-assigned decks
 Group By #2: Account

VoIP Gateway: o_gateway
 Group By #3: Code Name

[Test Query] [OK] [Cancel] [Apply]


Field	Description
Name	Query name. This field is mandatory. And you can't specify the name longer than 128 symbols.
Analyze by	Select a base report (<i>Summary</i> or <i>CDRs List</i>) as the ground for a current query. Different reports provide a different set of parameters that are available for monitoring. For instance, <i>CDRs List</i> allows you to manipulate with phone numbers while <i>Summary</i> allows such operations with ACD and ASR.
Report Template	Specify the template that you want to be used. <div style="border: 1px solid orange; padding: 5px;"> <p> Please note, that the system enables to set a limited number of parameters overridden from the assigned template. For example: If there are 2 or more clients assigned to the respective template, the system will take the first value for Factors Watcher settings, all other clients will be ignored.</p> </div>

Analyze mode	Specify the type of period which should be analyzed. There are two types of period available: <ul style="list-style-type: none"> • Fixed period means that it will be analyzed specified amount of minutes in the past from the Factors Watcher tool starting point • Calendar period the Factors Watcher tool starting point
Analyze interval of, min	What interval of time to check
Check every, min	How often to perform checks
Period Start	Enter the specific time to start counting the period from
Time zone	Specify timezone that will be used when pulling reports / blocking routes
Period Offset	Accessible only when the analysis is based on the Summary Report. The time offset intended to compare results of different intervals. It deducts specified period from the "Period Start", then takes the statistics according to the "Analyze interval of" value and the date calculated above.
Time Profile	When you choose the time profile, it will take into account the statistics in the <i>Factors Watcher</i> according to the chosen value, for example at peak times. However, if you click the "Test Query", it displays the statistics without the selected time profile.
Client	Select a client. You can set multiple clients.
Account	Select an account
Code Name	Select a code group
Code	Specify the code
Under Owner	Specify a Reseller
Code Deck	Select a code deck to pull code names from
VoIP Gateway	Select a VoIP gateway
Group by #	Group query by selectable parameter (client, account, code group, code or Voip gateway)
"Test Query" Button - click this button to test your query as <i>Summary Report</i> or <i>CDRs List</i> report for period specified Check Every and Analyze Interval of fields	

When you click "OK", the new query will appear on the list in the main window. You can edit properties of this query later by clicking  the edit icon.

Configuring Watcher Rules

Next step you need to take is to configure the watcher rules – what parameters under which conditions to monitor. To do this:

1. Choose the already existed Factors Watcher from the list or create a new.
2. Click the name of the Factors Watcher or click the  icon.
3. In the new window click "add rule" button and fill the set of fields to add an appropriate rule.

Screenshot: *Editing Factors Watcher rules*

Factors Watcher

Rows 1 – 1 of 1

Priority	Match				Factors	Action	Lock Period	Periodic lock	Expiration Date
	Leg Origin	Client	Code	VoIP Gateway					
0	origination		1		time_billed < 1	Alert	0 min		

Match — you can use "*" wildcard in these fields.
 Factors — you should list watch rules in this field delimited by ";", list of correct fields: time_total, time_billed, calls_total, cost_total, calls_notzero, calls_success, calls_busy, calls_nochannel, calls_error, acd_std, acd_cur, asr_std, asr_cur, pdd, scd.

OK Cancel Apply

Here is the full list of possible configurable fields:

Field	Description
Priority	Define a priority of rules execution if they have similar Match parameters
Match	<p>A set of parameters that are used as base for checks</p> <ul style="list-style-type: none"> Leg Origin — Type of route to check (<i>Origination, Termination or both</i>) Client — Specify the client to apply rules to Account — Specify the account to apply rules to Code Name — Specify the code name to apply rules to Code — Specify the code to apply rules to VoIP Gateways — Specify the VoIP gateway to apply rules to <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p>✔ To create a temporary rule that will override other rules with the same match parameters, you need to set up the rule with the highest priority and specify an appropriate <i>Expiration Date</i>. Therefore, existed multiple rules with the same match parameters will override each other and the rule with the highest priority will be applied.</p> </div>
Factors	<p>Factors that are applied to a current rule.</p> <p>Rules must be listed with delimiting symbol “;”.</p> <p>Correct list of rules: <i>time_total, time_billed, calls_total, cost_total, calls_notzero, calls_success, calls_busy, calls_nochannel, calls_error, acd_std, acd_cur, asr_std, asr_cur, pdd, scd</i>.</p> <p>For example, if you enter “<i>time total > 100</i>” this will mean that when total calls time count for respective match parameters goes over 100 minutes, system will create an alert</p> <p>It's possible to add factors watcher rule with negative values. For example, <i>cost_total < -10</i>.</p> <p>Factors with reference to the side-by-side reports:</p> <p>You can adjust these factors by your own using the next formula and pre-existing factors mentioned above: <i>factors_name_1</i> - value for the first period; <i>factors_name_2</i> - value for the second period; <i>factors_name_diff</i> - difference between periods.</p> <p>For example: cost_total_1 (of the 1st period), cost_total_2 (of the 2nd period), cost_total_diff (difference in %).</p>
Action	<p>An action that should be taken if a matched rule is found.</p> <p>There are respective options: Alert, Block Code/Code Name/Account/Client</p> <p>When one of these options is applied, the message will be shown in the section <i>Events log</i>.</p>



The options *Block Client/Account* will be invisible if you skip the second step (i.e. create a new factors watcher and group by the Client/Account) and "Group By #" fields are empty. If you group by the Client, the option "*Block Account*" won't be visible in the drop-down list of the "*Action*" column.

Lock Period	If action was block of number, destination or code, then define duration of that block in this field
Periodic lock	If either calendar period or fixed period is enabled, this lock will be expired at the end of a given period
Expiration Date	Specify date when the rule should be automatically deleted



Please note, that the **set of rules** in the "**Action**" field depends on how many parameters you defined in "**Group by #**" fields when a current query was created.

The "**Block Code**" option in the "**Action**" is available only if you set respective grouping in the *Tools / Factors Watcher settings*. For example, if you defined a code in the query, you will be able to block codes in watcher rules, etc.

Screenshot: Rules List

The screenshot shows the 'Factors Watcher' interface. At the top, there is an 'Add rule' button and a status indicator 'Rows 1 - 1 of 1'. Below this is a table with columns: Priority, Match, Factors, Action, Lock Period, Periodic lock, and Expiration Date. The 'Match' column has sub-columns: Leg Origin, Client, Code, and VoIP Gateway. The 'Action' column has a dropdown menu open, showing options: Block Code, Alert, and Block Code. A red arrow points to the 'Block Code' option in the dropdown. The 'Lock Period' column has a value of '0 min'. The 'Expiration Date' column has a date input field and a delete icon. Below the table, there are instructions for 'Match' and 'Factors' fields, and 'OK', 'Cancel', and 'Apply' buttons.

Priority	Match	Factors	Action	Lock Period	Periodic lock	Expiration Date
0	Leg Origin: origination, Client: , Code: 1, VoIP Gateway:	time_billed < 1	Block Code	0 min	<input type="checkbox"/>	<input type="text"/>

Match — you can use "*" wildcard in these fields.
 Factors — you should list watch rules in this field delimited by ";", list of correct fields: time_total, time_billed, calls_total, cost_total, calls_notzero, calls_success, calls_busy, calls_nochannel, calls_error, acd_std, acd_cur, asr_std, asr_cur, pdd, scd.



You can add factors watcher rule with negative values. For example, *cost_total* < -10.

Routing Details

This chapter describes **routing capabilities of JeraSoft VoIP Carrier Suite**. Please note, that your JeraSoft VCS installation should include the *Routing Module* to have the following available.

Introduction to VCS Routing Module

JeraSoft VCS is able to provide so-called Dynamic Routing features, also often called *External Routing*. Depending on your switch manufacturer, VCS provides these functions via RADIUS Protocol or SIP Redirect Server. To find out more about possible options for your switch manufacturers, please look through *VCS Integration Manual* or contact *JeraSoft Support*.

In VCS, The Dynamic Routing work is based on three principles: *Routing Plans, Routing Policies and Routing Table generation*.

So, there are few easy steps how to set it working:

Step 1: You need to create so-called Routing Plan with rules that describe your routing preferences and other criteria;

Step 2: You need to choose desired policy for your rules – a special formula to decide which routes should get a top priority (for example, this way you decide whether you want to do LCR or Quality Routing);

Step 3: Assign created Routing Plan to your origination customer(s). Then you need to wait until the Routing Table is created.

Please check sections below to get more information. The main module can be found in *Routing* section of the system if it is activated.

- [Routing Plans](#)
- [Routing Presets](#)
- [Routing Analysis](#)
- [Dynamic Routing Policies](#)
- [Dynamic Routing Table](#)

Routing Plans

On this page

- [Routing Plans List](#)
- [Adding New Routing Plan](#)
- [Editing Routing Rules](#)
- [Knowledge Base Articles](#)

Routing Plans List

Routing Plans section is available if your JeraSoft VCS includes the *Routing Module*. To access *Routing Plans* section, please log in to your system and go to *Routing – Routing Plans*.

This section allow to manage your routing rules for customers, providers and destinations. Each routing plan should be assigned to a respective customer (originator) for proper work of routing process.

You can combine both routing rules (*i.e. dynamic and static*) while creating a routing plan, also assign separate rules to each destination. Here you can find a list of created routing plans.

Screenshot: *Routing Plans* section main window

ID	Name	Reseller	Code Deck	Rules Hunting	DR Order	Rules
8	DR: Simple Quality	Company Name	—	longest only	by code / appeal	1
7	DR	Company Name	—	longest only	by code / appeal	2
9	DR	Company Name	—	longest only	by code / appeal	1
5	DR: Complex LCR	Company Name	—	longest only	by code / appeal	1
4	DR: Complex Quality	Company Name	—	longest only	by code / appeal	1
6	DR: DID + Simple LCR	Company Name	—	longest only	by code / appeal	2
3	DR: Proportional	Company Name	—	longest only	by code / appeal	1
2	DR: Simple LCR	Company Name	—	longest only	by code / appeal	1
1	DR: Simple Quality	Company Name	—	longest only	by code / appeal	1

Column	Description
ID	ID number of routing plan
Name	A name of routing plan
Reseller	Choose a reseller-owner of this routing plan. Additionally, you may choose any additional resellers that will be able to use this routing plan in «Allow Routing Plan only to following resellers» to the right
Code Deck	Select a Code Deck if you want to route by code names
Rules Hunting	Choose a hunting mode. Note, that this only applies to rules listed in Routing Plan Two options are available
	<ul style="list-style-type: none"> • longest only Routing will find only the longest matching code and will stop looking for shorter codes that comply to routing rule otherwise
	<ul style="list-style-type: none"> • all matching All possible matches will be found, including even shortest codes
DR Order	Select mode of routes sorting in the routing table. The options here are: <i>by appeal / code</i> – routes will be sorted in accordance to their resulting appeal value; <i>by code / appeal</i> – routes will be grouped by codes and then sorted by appeal value
	<ul style="list-style-type: none"> • by appeal / code Routes will be sorted in accordance to their resulting appeal value and then grouped by codes
	<ul style="list-style-type: none"> • by code / appeal Routes will be grouped by codes and then sorted by appeal value

Rules	An amount of rules, which refers to the respective routing plan
--------------	---

Adding New Routing Plan


To create a new routing plan click the “New Routing Plan” button, and fill out the following fields in the pop-up window.

Screenshot: Routing Plans window

The screenshot shows a 'Routing Plans' window with two main sections: 'GENERAL INFORMATION' and 'RULES PROCESSING'.
GENERAL INFORMATION: Fields include Name (text input), Reseller (dropdown menu showing 'Company Name'), Parent Routing Plan (dropdown), Code Deck (dropdown), Origination Limit (dropdown), Termination Limit (dropdown), and a checked checkbox for 'Routing loop protection'.
RULES PROCESSING: Fields include Rules Hunting (dropdown menu showing 'longest only'), DR Order (dropdown menu showing 'by code / appeal'), PM (text input showing '0' with '[USD / %]' next to it), and Vendor Limit (text input).
 At the bottom right, there are three buttons: 'OK' (blue), 'Cancel', and 'Apply'.

Section	Fields description	
General information	General routing plan information	
	• Name	Title of a routing plan
	• Reseller	Define the reseller/owner of current routing plan
	• Parent Routing Plan	Specify DR plan which will be parent for current plan
	• Code Deck	Select a Code Deck if you want to route by code names
	• Origination Limits	Define company or companies which will have access to this routing plan (also this restriction will be extended to their sub-companies) If there is no specified company, the following routing plan is available to view for all companies.
	• Termination Limits	Select company or companies which will have limit in termination for vendors who use it (sub-companies are not included)
	• "Routing Loop protection" check box	Excludes originating client from the list of terminators. If it is disable, it will be possible to route calls between different accounts of the same client. It is enable by default.
Rules processing	Options of rules processing	

ng	<ul style="list-style-type: none"> • Rules Hunting 	Select a hunting mode (the way how rules will be executed). They are the following: <ul style="list-style-type: none"> • longest only – routing will find only the longest matching code • all matching – all possible matches will be found, including even the shortest codes
	<ul style="list-style-type: none"> • DR Order 	Specify a method of routes sorting in routing table. The options are: <ul style="list-style-type: none"> • by appeal / code – routes will be sorted in accordance to their resulting appeal value and then grouped by codes • by code / appeal – routes will be grouped by codes and then sorted by appeal value
	<ul style="list-style-type: none"> • PM 	Define a Profit Margin value for current rule here
	<ul style="list-style-type: none"> • Vendor Limit 	Determine the number of used routes from the same vendor (if a vendor has multiple accounts). You can set the limit only for accepted account routes , not including the accounts blocked by the term groups.

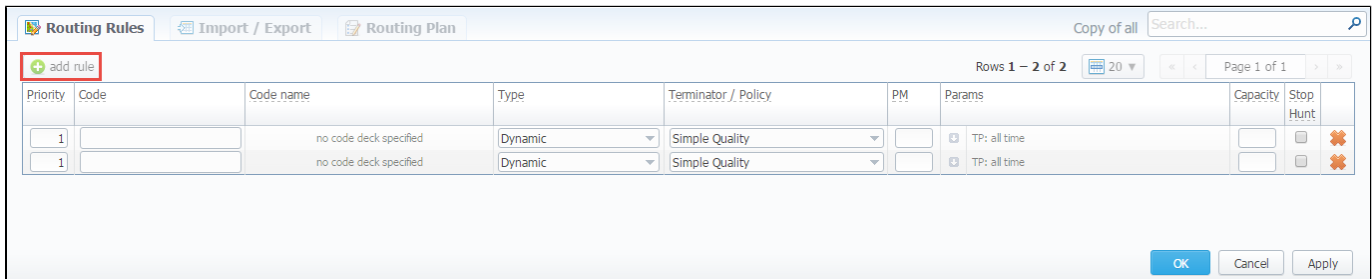
 Please note that "Origination Limit" and "Termination Limit" fields are visible only during:

- new routing plan creation;
- editing of already created routing plan if specified *Reseller* of this routing plan has at least one sub-reseller or manager.

Editing Routing Rules

Now you need to fill it with routing rules (Screenshot below). To do that click on routing plan's name, click the "Add rule" button and fill the following:


Screenshot: Routing Rules tab



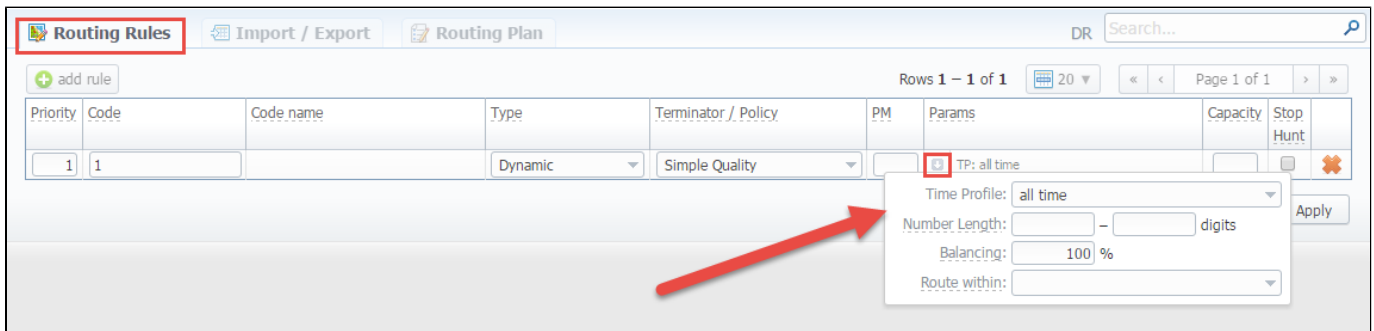
Priority	Code	Code name	Type	Terminator / Policy	PM	Params	Capacity	Stop Hunt
1		no code deck specified	Dynamic	Simple Quality		TP: all time		<input type="checkbox"/>
1		no code deck specified	Dynamic	Simple Quality		TP: all time		<input type="checkbox"/>

Field	Description
Priority	Define a priority of rules execution, if they have similar code or code name specified
Code	Enter a code which will be used in current routing rule, use * as wildcard. If DID type for current routing rule is selected, you may specify a code : <ul style="list-style-type: none"> • Any destination – rules with longer codes will be ahead of DID route, possibly leaving it out entirely if 'longest only' mode is used (* wildcard will be used as DID code) • Full DID – DID route will always be the first route (entire DID number will be used as code)
Code Name	You may select a code name here if you have code deck attached to routing plan. This code name is used in same fashion as code – to perform routing based on group of codes
Type	Select a type for routing for current rule: <ul style="list-style-type: none"> • Static • Dynamic • DID
Terminato	If you selected static type, you may specify a terminator here; if you selected dynamic type, specify routing policy for current rule

r / Policy	
PM	Define a <i>Profit Margin</i> value for current rule here
Params	A number of additional parameters available here
	<ul style="list-style-type: none"> Time Profile specify time profile
	<ul style="list-style-type: none"> Number Length set minimum and maximum length of destination number, that will be matched by this routing rule
	<ul style="list-style-type: none"> Balancing define percentage or proportion amount of traffic which will be sent to respective vendor who participates in balancing <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> <i>i</i> Please note that after changing <i>balancing value</i>, it is needed to restart SIP and/or RADIUS daemons. </div>
	<ul style="list-style-type: none"> Route within specify list of termination routing groups by which the route will be selected. If nothing is specified - looks only for accounts without specified groups (Please note this parameter available only for dynamic rules)
<ul style="list-style-type: none"> Allow rule for select list of origination routing groups for which the current rule will be allowed. If nothing is specified - works for all accounts. 	
Capacity	Limit capacity for current rule (leave blank for unlimited)
Stop Hunt	If this field is checked, this means that rule search will be stopped on that rule and rules after the checked rule will not be executed for current call

To view more details you can click *the Parameters icon*  and the following advanced settings will be available: *Time Profile, Number Length, Balancing, Allow rule for*.

Screenshot: Routing rules settings



The screenshot shows the 'Routing Rules' configuration interface. At the top, there are tabs for 'Routing Rules', 'Import / Export', and 'Routing Plan'. Below the tabs is a table with columns: Priority, Code, Code_name, Type, Terminator / Policy, PM, Params, Capacity, and Stop Hunt. The first row in the table has Priority '1', Code '1', Type 'Dynamic', and Terminator / Policy 'Simple Quality'. The 'Params' column for this row is expanded, showing a dropdown menu with 'TP: all time' selected. Below the dropdown, there are input fields for 'Number Length' (with a minus sign and 'digits'), 'Balancing' (set to '100 %'), and 'Route within'. A red arrow points to the 'Params' column header in the table.

Also, you may go to *Routing Plan* tab to edit any information you entered during plan creation process or to *Import / Export* tab to import or export list of routing rules respectively. Please pay attention that the column order in importing file must correspond to presented on the screenshot below.

Screenshot: Importing file format

code	code name	priority	type	client	account	policy	profit margin	time profile	num length min	num length max	balance	orig groups	term groups	capacity	hunted
	Afghanistan MTN mobile	0	static	test				---			100				
	Afghanistan MTN mobile	1	static	test				---			100				
	Azerbaijan Azercell mobile	0	static	test				---			50				
	Azerbaijan Azercell mobile	0	static	test				---			50				
	Azerbaijan Azerfon mobile	0	static	test				---			50				
	Azerbaijan Bakcell mobile	0	static	test				---			50				
	Cambodia	0	static	test				---			100				
	Cambodia mobile	0	static	test				---			100				
	Cambodia mobile	1	static	test				---			100				
	Chad Airtel mobile	0	static	test				---			100				
	Chad Airtel mobile	1	dynamic			Simple LCR		---			100				
216*		0	dynamic			Simple LCR		---			100				
220*		0	dynamic			Simple LCR		---			100				
297*		0	static	test				---			100				
370*		0	dynamic			Simple LCR		---			100				



The route for the call will be acceptable, if a client's **balance is enough for** one call with a duration of **2 seconds**.



Note: After all info is entered and rules created, you need to go to *Management - Clients* section and assign this routing plan to one or more of your origination clients.

Knowledge Base Articles

- [How to route by SRC Number / Orig Group?](#)
- [US Billing & Taxation](#)
- [How to set calls to come from one specific originator?](#)
- [How to set up a functional capacity?](#)
- [How to exclude specific vendor from Dynamic Routing?](#)

Routing Presets


On this page

- [Routing Presets](#)
- [Adding Routing Presets](#)
- [Performing Number Translation](#)

Routing Presets

This tool allows to **block codes or whole destinations during the *Dynamic Routing***. If you want to set the Routing Preset for respective customer, all you need to do:

- Go to the *Management* and click *Clients* to see the full list with your customers;
- Choose a respective client and open *Client Info* by clicking on the name. A pop-up window with customer's setting will appear;
- On the *Client Settings* Toolbar open *Presets* tab.

To quickly open the Routing Presets: Go to the *Management*, in the *Clients* section, click *Edit Routing Presets*  icon next to the name of a respective customer.


Screenshot: Routing presets settings

You can add origination and termination presets, to block desired destination or code by selecting «**Deny**» **check box**.

Also, you can perform different number translations under «*Traffic Processing*». These translation rules use POSIX expressions syntax.



For example, if the number is 123#456, *Match field* is ^123#(.*) and *Replace field* is 789\1, then resulting number will be 789456.

Adding Routing Presets


To add a new routing preset choose the type of the preset (*i.e. Origination, Termination*) and click plus sign  next to the *Origination/Termination Presets*. Then enter all required information in next fields:

Field	Description
Account name	Client's account that should be used in current routing rule
Code	Specify a code of destination (use * as wildcard)
Code Name	Select a destination name in this field if applicable
Terminator	Specify a vendor or specific vendor's account for whom this routing rule will work (<i>i.e all calls coming from clients to that specified vendor will be</i>

Originator	Define a customer for whom this routing rule will work				
Deny	Enable this to deny current route selection				
Expiry Date	<p>Set an exact date for which the block should be active. If the field is empty it will never expire.</p> <p>Please note that the format of <i>Expiry Date</i> field was modified and now you need to indicate the "MM/YY/DD" instead of setting the duration in n</p> <p>Screenshot: <i>Expire date in Routing presets</i></p> <div> </div>				
Added	<p>When and how the rule was originally added</p> <table border="1"> <tr> <td> <ul style="list-style-type: none"> manual </td> <td>Added using this section</td> </tr> <tr> <td> <ul style="list-style-type: none"> auto </td> <td>Added by Factors Watcher</td> </tr> </table>	<ul style="list-style-type: none"> manual 	Added using this section	<ul style="list-style-type: none"> auto 	Added by Factors Watcher
<ul style="list-style-type: none"> manual 	Added using this section				
<ul style="list-style-type: none"> auto 	Added by Factors Watcher				

 **Tip:** To import *Routing Presets* click the "Import"  icon next to the *Origination Presets*. This feature allows you to add new presets to already existing or to purge all existing presets and add new ones.

Performing Number Translation

To perform a number translation, click plus sign  next to the *Traffic Processing* and fill the following fields:

Field Name	Field Description
Origin	Specify when current translation rule will be applied
	<ul style="list-style-type: none"> ORIG For calls originated from a client
	<ul style="list-style-type: none"> TERM For calls terminated to a client
	<ul style="list-style-type: none"> DR On Dynamic Routing, before sending calls to a terminator
Account	Select a respective account

Name	
Code	Specify a code of destination (use * as wildcard)
Code Name	Or select a destination name in this field if applicable
Src Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will be in respect to settings in <i>Src Replace field</i>
Src Replace	Put a resulting action in this field, that will be performed, if translation process takes place
Dst Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will be in respect to settings in <i>Dst Replace field</i>
Dst Replace	Allows you to put matched calls into specified Origination Routing Group
Add Orig Group	Allows you to put matched calls into specified Origination Routing Group
Order	Sets rules ordering, first matched rule will stop further number translations

Dynamic Routing Policies

This section describes the list of **currently available routing policies for VCS**.

Screenshot: DR Policies section main window

The screenshot shows a web interface for 'DR Policies'. At the top left, there is a search bar and a magnifying glass icon. Below the search bar, the text 'DR Policies' is displayed. On the right side, there is a pagination control showing 'Rows 1 - 5 of 5', 'Pages: 1', and a page number '1'. The main content area is a table with two columns: 'Status' and 'Name'. Each row in the table has a green circle icon in the 'Status' column and a policy name in the 'Name' column. The policies listed are: Complex LCR, Complex Quality, Proportional, Simple LCR, and Simple Quality.

▲ Status ▼	▲ Name ▼
●	Complex LCR
●	Complex Quality
●	Proportional
●	Simple LCR
●	Simple Quality


Policy	Description
Complex LCR	Three cheapest routes that are sorted by the quality.
Complex Quality	Three routes with the highest quality that are sorted by price.
Proportional	When the price is lower and a route quality is higher, it has a higher priority.
Simple LCR	Generic price-based routing.
Simple Quality	Generic quality-based routing.

You may browse each policy routing formula by clicking on respective policy's name. Please do not change formulas to avoid unexpected routing results.

Dynamic Routing Table

The **JeraSoft VCS solution** operates with its own **Routing Table**, that is automatically obtained over specified regular periods of time to provide the «*dynamic*» part of the *Routing*.

The **Routing Table** includes latest changes of whole routing process, that includes all updates made to system configuration, such as clients or rates update, changes to routing plans, accounts reconfiguration etc. It is always a good idea to recreate your routing table, to be able to see how your routing will work with current settings. Of course, if you don't have time to wait till it is created automatically, you can do that in manual mode.

To generate a routing table manually, please **go to *System – Task Scheduler*, and click the respective  button**. And then the routing table will be generated.

Routing Analysis

On this page:

- [Routing Analysis Form](#)
- [To create Routing Analysis Report:](#)
- [Export generated report](#)
- [To create report templates](#)
- [Knowledge Base Articles](#)

Routing Analysis Form

This section represents a **route analyzer tool** that allows to manage dynamical routes and simulate different routing models without hurting live voice traffic. To access go to the **Routing – Routing Analysis**. It should be noted, that this tool can be of use only when you are using **Dynamic Routing feature**.

The main window of *Routing Analysis* section represents a query form with following parameters:


Screenshot: DR Analysis form

To create Routing Analysis Report:

In order to generate routing analysis enter next parameters in the query form:

Section	Field Description
Filters	Filters that will be used for generating correct routing analysis. Click plus sign next to the "Filters" to select convenient filters. Also, you can cancel any filter by clicking the sign to delete.
	Number Enter a phone number to define a destination. This field is mandatory.
	Client Select a client you want to create the report about. Also, you can specify respective calling cards and calling shops
	Account Select an account you want to create report about
Additional Filters	
There are following accessible additional filters:	
<ul style="list-style-type: none"> • By calls: VoIP Gateway. • Extras: Rate group; Routing Plan. 	
Screenshot: Routing Analysis form/ Filters	
Settings of Calls	

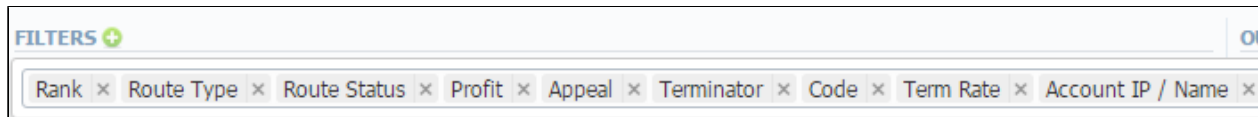
VoIP Gateway	Define VoIP gateway that specified in the term account
Extra Settings	
Rate group	Enter the group that this rate belongs to. Refers to Jurisdictional Billing and Routing Module
Routing Plan	Enter the plan with a respective routing rule

Output This form contains **settings of the output** data of the report.
Click plus sign  near the **"Columns"** to select respective columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report


There are following columns to add in the report: Rank, Route Type, Route Status, Profit, Appeal, Termination, Code, Term Rate, Account IP/Name, Dst Number, VoIP Gateway.


Screenshot: Routing Analysis form/ Columns





Rank Vendor position during routing. It's applicable and the system puts values in order when route status is accepted.

Route Type Type of the route that includes: **destination, policy and rule properties (balancing, priority), time profile, orig groups, term groups, debug information**

A blue icon  in the column shows a **static route**

A violet icon  indicates a **DID route**

A green icon  in the column shows a **dynamic route**

To view a current info please point to the Type icon  in the Route Type column.

Screenshot: Routing Analysis / Route Type

Rule Destination:
38044 | Dynamic route

Policy:
Simple Quality

Rule Properties:
Balancing: 90%
Priority: 1


Time Profile
weekends


Orig Groups
Group for Extra rate


Term Groups
Premium


Debug Info:
#1 {DST#38044 TP#2 P#1 T#d DrDST#38044 Appeal#3.33333 C#40 "TestRout38044_term / TestRout38044_term_acc"}

Route Status Shows **the state of the route, number length (min current max), also routing rule capacity, termination client/account/reseller capacity**

 for **accepted**


 for **no capacity**

 for **denied** (for example, not matched Reseller/ number length limit)

To view a current info please **point to the Status icon**  in the **Route Status column**.

Screenshot: Routing Analysis / Route Status

Route Status:
accepted
Number Length
 12 ≤ 12 ≤ 13
 min ≤ current ≤ max
Routing Rule Capacity
 2 0 active calls
Terminator Account Capacity:
 5 0 active calls
Terminator Client Capacity:
 9 0 active calls
Terminator Reseller Capacity:
 10 0 active calls

Profit Displays the **Profit** and the **Profit Margin** in the currency indicated in the Client's settings. Also, it shows the **Term Rate**, **Profit** and **Profit Margin** in the currency previously mentioned in the Rate Table specification. To view a current info please point to the **Profit icon**  in the respective column.

Screenshot: Routing Analysis / Profit

Profit:
 0.28000016 UAH
Profit Margin:
 0.22 UAH


Term Rate:
 0.01000000 USD
Profit:
 0.01272728 USD
Profit Margin:
 0.01 USD

Appeal	Shows the appeal automatically calculated by the system according to the chosen DR Policies (<i>Routing section - DR</i>)
Terminator	The name of the respective terminator or his account name specified in the Client's setting
Code	Here you can see matched code in the terminator's rate table
Term Rate	Rate that is used to terminate the call
Account IP/Name	The name or IP of the account
Dst Number	Shows destination number that is sent to provider when all matching number translations are performed
VoIP Gateway	Displays respective VoIP gateway that specified in the term account

Other output settings

Type Choose a format of the report from a drop-down list: **Web/CSV/Excel XLS/Excel XLSx**. Also, select next to the "Type" field a look of table view:

- *Plain* - a simple table view
- *Grouped* - a table view with grouped data and possibility to collapse it

 Please note, that *Grouped* type of table view is available only for *Excel XLSx* and *Web* formats, it doesn't work for other formats.

After selecting all needed parameters click **"Query"** button and the system will generate a report:

Screenshot: Routing Analysis

Routing Analysis

FILTERS

Number: 38044
 Client:
 Account: TestRout38044_orig: TestRout38044_orig_acc

OUTPUT COLUMNS (11)
 Type: Web | Grouped

Save Query **Load Query...** **Query**

Dst Number: **38044**
 Routing Plan: TestRout38044_route
 DR Order: by code / appeal
 Rules Hunting: all matching

Client: **TestRout38044_orig**
 | TestRout38044_orig_acc
 Destination: 38044
 Orig Rate: 0.5000 USD
 Orig Groups: Group for Extra rate / _Yana_test
 Origination Denied: **by preset** | Code: 38044

Client Capacity: 6 | 0 active calls
 Account Capacity: 4 | 0 active calls
 Reseller Capacity: 7 | 0 active calls

Export to XLSx

Type	Rank	Route Type	Route Status	Profit	Appeal	Terminator	Code	Term Rate	Account IP / Name	Dst Number	VoIP Gateway	
Normal												
Normal	1					3.3333	TestRout38044_term TestRout38044_term_acc	38044	0.0100 USD	11.22.22.18/32	31#3804445697889	Second_GW

Also, you can save and load the following report by clicking respective buttons **"Save Query"** and **"Load Query"** in the form.

i To expand or collapse data in your report, click the **+** plus or **-** minus signs. If the data is grouped in the report, it will be shown initially collapsed.

Export generated report

You can export data to XLSx file that contains only currently presented data, no automatic request to update data while exporting.

To download a .xlsx file, click the **"Export to XLSx"** button on the toolbar.

i Please note, that you can check an **actual date interval** of the report by clicking **the Info icon** **i** and it could be different from **the Interval** specified above if there is no date for the period.

Screenshot: Routing Analysis

Dst Number: **38044**
 Routing Plan: TestRout38044_route
 DR Order: by code / appeal
 Rules Hunting: all matching

Client: **TestRout38044_orig**
 | TestRout38044_orig_acc
 Destination: 38044
 Orig Rate: 0.5000 USD
 Orig Groups: Group for Extra rate
 Origination Denied: **by preset** | Code: 38044

Client Capacity: 6 | 0 active calls
 Account Capacity: 4 | 0 active calls
 Reseller Capacity: 7 | 0 active calls

Export to XLSx **i**

Type	Rank	Route Type	Route Status	Profit	Appeal	Terminator	Code	Term Rate	Account IP / Name	Dst Number	VoIP Gateway	
Normal												
Normal	1					3.3333	TestRout38044_term TestRout38044_term_acc	38044	0.0100 USD	11.22.22.18/32	31#3804445697889	Second_GW
Not matched resellers limitations												
Not matched resellers limitations	2					3.3333	Vendor #46 none Account #198	38044	0.0100		3804445697889	Any
Not matched resellers limitations	3					3.3333	Vendor #150 none Account #225	380	0.0856		3804445697889	Any
Not matched resellers limitations	6					3.3333	Vendor #21 none Account #181	380	1.0000		3804445697889	Any
Not matched resellers limitations	7					3.3333	Vendor #21 none Account #180	380	1.0000		3804445697889	Any
Not matched resellers limitations	5					3.3333	Vendor #22 none Account #182	380	1.0000		3804445697889	Any
Not matched resellers limitations	4					3.3333	Vendor #136 none Account #214	380	2.5000		3804445697889	Any

To create report templates

Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: Reports Templates form

Reports Templates
 WATCH

ROUTING ANALYSIS

Title:

Reseller:

Recipients:

Run Time:

Days of Week:

REPORT QUERY

FILTERS

Number:

Client:

Account:

Group By:

OUTPUT

Type:

COLUMNS (11)

Section	Description
Routing Analysis	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a respective Reseller and all users that belong to this Reseller will be able to use this reports template
Watch	This tool allows to automatically generate a report at the appropriate time and send the results to the list of e-mails
	Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i> .
	Recipients Specify recipients, also, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of the week to automatically generate a report. For example, you can run a report only on Monday or each day of week
Report Query	Here you need to specify filters that will be used for generating correct report and choose the output type to view the report

Please note, that if there are changes in **the Term Rate Table** you need to launch **the Dynamic Routing Manager in the Task Scheduler** (System section - Task Scheduler). **Routing Analysis** shows routes based on routing table built on the last run of the Dynamic Routing Manager. So won't be able to see the last changes with Routing Rules until Dynamic Routing Manager will be restarted.

If applicable, you can check the **Next Rate** in the report, find **Term Rate** column, and then point to the specified amount.

Screenshot: Routing Analysis report

Type	Rank	Route Type	Route Status	Profit	Appeal	Terminator	Code	Term Rate	Account IP / Name	Dst Number	VoIP Gateway
Normal											
Normal	2				3.3333	TestRout38044_term TestRout38044_term_acc	38044	0.0100 USD 11.22.22.18/32	31#3804445697889		
Not matched resellers limitations											
Not matched resellers limitations	3				3.3333			0.0100 USD 112.112.0.0/32	3804445697889	Any	
Not matched resellers limitations	7				3.3333	Archive Check_term AC_term_2		0.0856 USD 112.112.0.0/32	3804445697889	Any	

Next Rate:
0.005 | ▼ -0.0050 USD
Effective From:
11/04/2015 00:00:00 +0000

Knowledge Base Articles

- [Why does not Routing Analysis show routing according to rule's changes?](#)
- [Why there is no route observed?](#)
- [What to do if routing doesn't work?](#)

Configuration

This chapter of our Guide contains everything that relates to the **Configuration** tab of **JeraSoft VoIP Carrier Suite**. For more details please go to the related sections:

- [Code Decks](#)
- [Currencies](#)
- [Payment Accounts](#)
- [Payment Terms](#)
- [Payment Gateways](#)
- [Time Profiles](#)
- [Taxes Profiles](#)
- [Groups](#)
- [Invoices Templates](#)
- [VoIP Gateways](#)
- [Settings](#)

Code Decks

On this page

- [Code Decks List](#)
- [Creating New Code Deck](#)
- [Managing Code Decks](#)
 - [Adding Codes](#)
 - [Importing Codes](#)
 - [Exporting Codes](#)

Code Decks List

This section houses all code decks – name sets for your codes. By having multiple code decks you can freely operate in different names for same codes and change them on the fly. The main window of this section is presented on Screenshot:

Screenshot: Code Decks section main window

ID	Deck Name	Reseller	Codes		
33	Code Deck A	Company Name	0		
34	Code Deck B	Company Name	0		
35	Code Deck C	All Resellers	0		

The deck itself consists of destination code and destination name. Thus, having lots of code decks, you may have lots of different name-sets for same destination codes.

Creating New Code Deck

To create a code deck, click the “New Code Deck” button and specify the deck name and reseller it belongs to (Screenshot):

Screenshot: Code Deck window

Name:

Reseller:

Managing Code Decks

To manage your code deck left-click on the deck's name.

In the window with the list of all existing codes (Screenshot below) you will be able to perform next operations:

Screenshot: Code deck's contents

Code	Code Name	Country		
936	AFGHANISTAN			

Adding Codes

When you click the "New Code" button, you will be able to add a code group to your deck. The pop-up window contains the following parameters (Screenshot):

Screenshot: Code Decks Window

Field	Description
Code	Destination code
Code Name	Displayed name of a code group
Country	Which country the codes in current group will belong to



The spaces at the beginning and the end of code names will not be shown up starting from the VCS 3.10.4. Although, the spaces between separate words of code names are saved and respectively reflected in the web interface.

Importing Codes

It is the possibility to import a list of codes and code names from a file, the whole import process can be logically divided into two steps.

The first step is to go to the "Import Codes" tab (Screenshot below) then select a file to import and set some additional configurations.

Screenshot: "Import Codes" Step 1

These settings are the following:

Section	Field	Description
File Process	Select file to import	Select an import file
	Fields delimiter	Specify here a delimiter symbol
Import Process	Deck update mode	Specify the code deck update mode. There are three possible modes: <ul style="list-style-type: none"> • Import only not existing codes • Import all codes (update existing) • Import all codes (purge code deck first)
	On errors	Define what to do if an inconsistency or error was found in importing file: <ul style="list-style-type: none"> • Import correct rows and show all found errors • If errors are found, abort import and show all errors

After selecting a file and specifying all additional parameters click "Process>>" button.

On the second step system will recognize the file, and display few first rows of it. Then you need to select the header of each column and then press "Import" button.

Screenshot: "Import Codes" Step 2

			Skip
1	Code Name-1		<input type="checkbox"/>
2	Code Name0		<input type="checkbox"/>
4	Code Name2		<input type="checkbox"/>
5	Code Name3		<input type="checkbox"/>
6	Code Name4		<input type="checkbox"/>
7	Code Name5		<input type="checkbox"/>
8	Code Name6		<input type="checkbox"/>
9	Code Name7		<input type="checkbox"/>
10	Code Name8		<input type="checkbox"/>
11	Code Name9		<input type="checkbox"/>
12	Code Name10		<input type="checkbox"/>
13	Code Name11		<input type="checkbox"/>
14	Code Name12		<input type="checkbox"/>
15	Code Name13		<input type="checkbox"/>
16	Code Name14		<input type="checkbox"/>
17	Code Name15		<input type="checkbox"/>
18	Code Name16		<input type="checkbox"/>

After you click the "Import" button, the system will start importing process. When progress-bar reaches 100%, your import is done!

The import file may have this structure:

Code	Code Name	Country
55	Brasil	Brasil
5531, 5531210	Brasil – Belo Horizonte	Brasil
55312111	Brasil – Belo Horizonte	Brasil

Exporting Codes

This feature allows you to export a content of a code deck to file. To export info to file, do the following: go to "Export Codes" section tab (Screenshot down below) and specify the following: delimiter symbol in "Fields delimiter" field and first CSV file row as a title row with a "With headers row" checkbox (optional). After you press "OK" button, you will be prompted to save a file. Enter respective path on your hard drive.

Screenshot: "Export Codes" section tab

Fields delimiter: ,

With headers row

Currencies

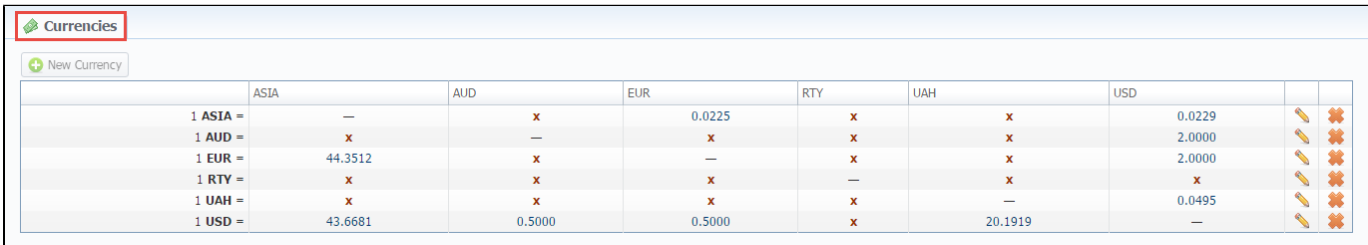
On this page

- [Currencies List](#)
- [Adding New Currency](#)
- [Specifying Currencies Rate](#)

Currencies List

This section displays the list of all currencies, registered in the system:

Screenshot: Currencies section main window



The screenshot shows a window titled "Currencies" with a "New Currency" button. Below is a table of currency exchange rates. The table has columns for ASIA, AUD, EUR, RTY, UAH, and USD. Each row represents a currency and its exchange rate with other currencies. The table is as follows:

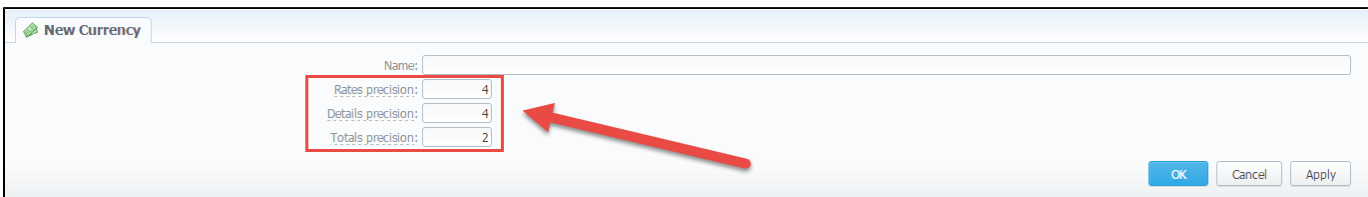
	ASIA	AUD	EUR	RTY	UAH	USD		
1 ASIA =	—	x	0.0225	x	x	0.0229		
1 AUD =	x	—	x	x	x	2.0000		
1 EUR =	44.3512	x	—	x	x	2.0000		
1 RTY =	x	x	x	—	x	x		
1 UAH =	x	x	x	x	—	0.0495		
1 USD =	43.6681	0.5000	0.5000	x	20.1919	—		

The list is displayed as currency exchange table, where each currency has direct exchange rate with any other currency.

Adding New Currency

You can add new currency by clicking the "New Currency" button. In pop-up window (see screenshot below), you should specify name for the new currency.

Screenshot: New Currency window




The screenshot shows a "New Currency" window. It has a "Name:" field. Below it are three fields for precision: "Rates precision:" with a value of 4, "Details precision:" with a value of 4, and "Totals precision:" with a value of 2. A red arrow points to these fields. At the bottom right, there are "OK", "Cancel", and "Apply" buttons.

Also, while creating a new currency you can specify decimal places for accurate monetary values formatting in the system:

- **"Rates precision"** - the number of decimal places for rates formatting.
- **"Details precision"** - the number of decimal places for detailed monetary values formatting. This precision is used for all reports except CDR report.
- **"Totals precision"** - the number of decimal places for total monetary values formatting.

The respective number of symbols will be displayed in all reports with cost and rate values in the statistics. Also, it will be shown in the invoices, except total values (totals always have 2 decimal places in invoices).

Specifying Currencies Rate

After you add currency, you need to specify the rate. To do this, click the  icon from the currencies list to open exchange rate settings.

In pop-up window you can view a history of currency's rate changes that were made from currency's creation up to this moment.

Screenshot: Currency's rate changes history

Exchange Rate UAH / EUR

+ Add Rows 1 – 1 of 1 20 Page 1 of 1

Date	Rate	Change	
04/13/2016 15:00:00 +0000	0.26000000	0.00000000	✖

OK

To add new currency's rate click the "Add" button. Then you can specify currency's rate in "Rate" field. "Date" field displays the date of current currency's rate change, which will be recorded by system (Screenshot).

Screenshot: Adding new currency's rate

Exchange Rate UAH / EUR

+ Add Rows 1 – 1 of 1 20 Page 1 of 1

1 UAH = 0 EUR

Date: 2016-04-13 15:00:00+0000

Date	Rate	Change	
2016-04-13 15:00:00+0000	0.26000000	0.00000000	✖

Add OK

Tip: Statistics data in new currency will be available after adding currency into the system, but if the currency has an old start date and you want old data to be billed in this currency, you need to run calls rerating.

Warning: Please note that *changing of the system currency* requires running of *Dynamic Routing Manager* to generate *routing table* with rates in new system currency.

Payment Accounts

On this page

- [Payment Accounts List](#)
- [Adding New Payment Account](#)

Payment Accounts List

This section allows you to **create different payment accounts** for correct and **precise transactions (payments) management**.

These accounts are exact payment definitions which will be visible in *Transactions* section. For example, you can have *Bank Transfer* and *Credit Card* accounts, and while applying respective payments, you will be able to define that payment origin by selecting a respective account.

Screenshot: *Payment Accounts* section

ID	Name	Reseller
3	Authorise.Net Acc A	all resellers
4	Authorise.Net Acc B	all resellers
5	PayPal Acc A	all resellers
6	PayPal Acc B	all resellers

Adding New Payment Account

To create new payment account, simply click "New Payment Account" button, specify an account name and a reseller (see screenshot below). After this, this account will be available in *Transactions* section.

Screenshot: *Payment Account form*

Name:

Reseller:

Payment Terms

On this page

- [Payment Terms List](#)
- [Adding New Payment Terms](#)

Payment Terms List

This section helps to make the clients' invoicing easier and faster by allowing to use autoinvoicing profiles. The main window is displayed on Screenshot:

Screenshot: *Payment Terms section*

ID	Name	Payment	Grace Period	Notify Days
2	14/14	every 14 days	14 days	on 10, 5, 3, 1 day(s) before due date

This list houses the profiles that determine payment terms. These profiles are used to autoinvoice your clients.

Adding New Payment Terms

You can add a new such profile by pressing "New Payment Terms" button. A dialog window (Screenshot below) allows you to specify next parameters:

Screenshot: *Adding new payment form*

Name:
 Payment: every days
 Grace Period: days
empty = do not check
 Notify Days: day(s) before due date
empty = do not check

Field	Description
Name	Current profile name
Payment	You can specify the exact day or the frequency of payments here (for example, on 7-th day of the month or every 10 days)
Grace Period	Period that specifies how much time the client has to pay the bill after he was invoiced, it's the Due Date in invoices (so-called "Deferral period")
Notify Days	Here you can set how many days before the payment date (invoicing date + grace period) reminders will be sent to the client. For example, if you will enter 10 as a value, the reminder will be sent 10 days before the payment date. You can specify more than one value in this field dividing them with comma symbol - ",".



Please note, if the invoice is expired the notification won't be sent.

Payment Gateways

On this page

- [Payment Gateways Section Main Window](#)
- [Configuring Payment Gateways](#)
 - [PayPal Integration Details](#)

Payment Gateways Section Main Window

This section is dedicated to configuration of methods your customers may use to recharge their balance. Currently, there are few default methods available: *Authorize.net*, *Moneybookers*, *PayPal*, *Top-Up cards*, *QIWI* and *Ukash* (see screenshot below).

Screenshot: Payment Gateways section

AUTHORIZE.NET

ORDER POSITION:

Login:	<input type="text"/>	Add your API login ID
Transaction Key:	<input type="text"/>	Add your API transaction key
Amount Limits:	<input type="text"/>	Possible values for top-up separated by comma (eg "5, 20, 100"). If empty — user can specify any value. Field should be empty for top-up cards.
Payment Account:	Authorise.Net Acc A	Specify account which will be used for transactions from this payment gateway.
Description:	Here you can add funds to your balance by using your PayPal account.	A user will see this text as a help-tip for respective payment method.

UKASH

ORDER POSITION:

Security Request Token:	<input type="text"/>	20-Character alphanumeric unique Request-Token provided by Ukash. The token is used to validate the merchant account.
Security Response Token:	<input type="text"/>	20-Character alphanumeric unique Response-Token provided by Ukash. The token is used to validate the merchant account.
Brand Id:	<input type="text"/>	Ukash will supply a brand id to the merchant for each of the brands they wish to differentiate between. The appropriate brand id must then be sent through on each transaction request.
Gateway Currency:	U.S. Dollar (USD)	Currency which will be used by user to perform a payment
System Currency:	USD	This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).
Amount Limits:	10	Possible values for top-up separated by comma (eg "5, 20, 100"). If empty — user can specify any value. Field should be empty for top-up cards.
Payment Account:	General	Specify account which will be used for transactions from this payment gateway.
Description:		A user will see this text as a help-tip for respective payment method.

MONEYBOOKERS

ORDER POSITION:

E-mail:	<input type="text"/>	Your Moneybookers e-mail, payment recipient
Secret word:	<input type="text"/>	Your Moneybookers secret word you set in your Moneybookers profile Merchant Tools
Gateway Currency:	U.S. Dollar (USD)	Currency which will be used by user to perform a payment
System Currency:	USD	This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).
Amount Limits:	<input type="text"/>	Possible values for top-up separated by comma (eg "5, 20, 100"). If empty — user can specify any value. Field should be empty for top-up cards.
Payment Account:	Authorise.Net Acc A	Specify account which will be used for transactions from this payment gateway.
Description:	Here you can add funds to your balance by using your PayPal account.	A user will see this text as a help-tip for respective payment method.

PAYPAL

ORDER POSITION:

E-mail:	<input type="text"/>	You PayPal e-mail, payment recipient.
Gateway Currency:	U.S. Dollar (USD)	Currency which will be used by user to perform a payment.
System Currency:	USD	This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).
Amount Limits:	<input type="text"/>	Possible values for top-up separated by comma (eg "5, 20, 100"). If empty — user can specify any value. Field should be empty for top-up cards.
Payment Account:	Authorise.Net Acc A	Specify account which will be used for transactions from this payment gateway.
Description:	Here you can add funds to your balance by using your PayPal account.	A user will see this text as a help-tip for respective payment method.

QIWI

ORDER POSITION:

E-mail:	<input type="text"/>	Your QIWI e-mail, payment recipient.
Provider ID:	<input type="text" value="0"/>	QIWI provider ID.
Payment Account:	Authorise.Net Acc A	Specify account which will be used for transactions from this payment gateway.

A user will see this text as a help-tip for respective payment method.

Description: Here you can add funds to your balance by using your PayPal account.

TOP-UP CARDS
ORDER POSITION:

Payment Account: Authorise.Net Acc A

Specify account which will be used for transactions from this payment gateway.

Description: Here you can add funds to your balance by using your PayPal account.

A user will see this text as a help-tip for respective payment method.

Configuring Payment Gateways

To configure the gateways, you need to select a Reseller by using «*Settings for*» drop-down menu in the top-right corner of the window. This will mean that all customers belonging to selected Reseller will have these settings. The settings themselves depend on the payment system and can include specific options for each. The shared options are following:

Option	Description
E-Mail	Respective system e-mail, that should be used
Gateway Currency	Currency of the gateway that will be used to perform payment
System Currency	Select a currency from available in VCS to be used during payment. It should match <i>Gateway Currency</i>
Amount Limits	Specify allowed values for balance recharge, divided by comma (for example, "5, 10" means that user will be able to recharge only for 5 or 10 USD). If left empty – user can specify any value
Payment Account	Select which payment account should be used for payment from respective payment gateway
Description	User will see this text as tooltip for current payment method

Also, you may specify the order of displaying *Payment methods* (if more than one method is selected) in the field called **ORDER POSITION** in the top right corner of the *Payment method* window.

PayPal Integration Details

For proper work of **PayPal service**, you should **enable an access for a list of IP addresses in your Firewall settings**, which can be found here: https://ppmts.custhelp.com/app/answers/detail/a_id/92

Plus, you can find **detailed description on how to enable IPN** by visiting the following link: https://ppmts.custhelp.com/app/answers/detail/a_id/14/related/1

Time Profiles

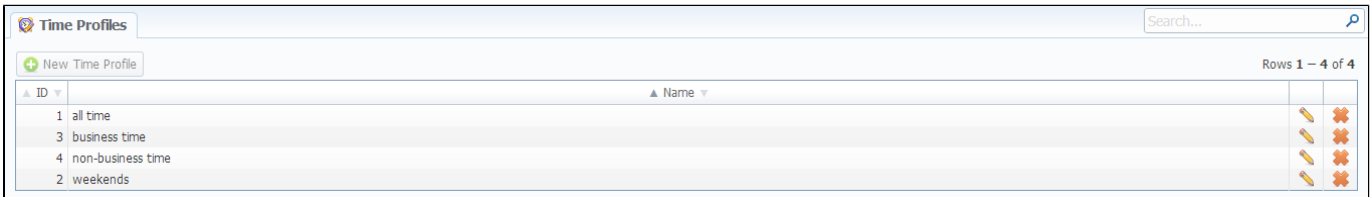
On this page

- [Time Profiles List](#)
- [Adding New Time Profile](#)

Time Profiles List

This section is used to create and manage time profiles. It allows you to divide rates by time of usage. For example, this can be used to sell traffic for more in business-time, and lower the price in non-business time. Main window looks like on Screenshot:

Screenshot: Time Profiles section main window

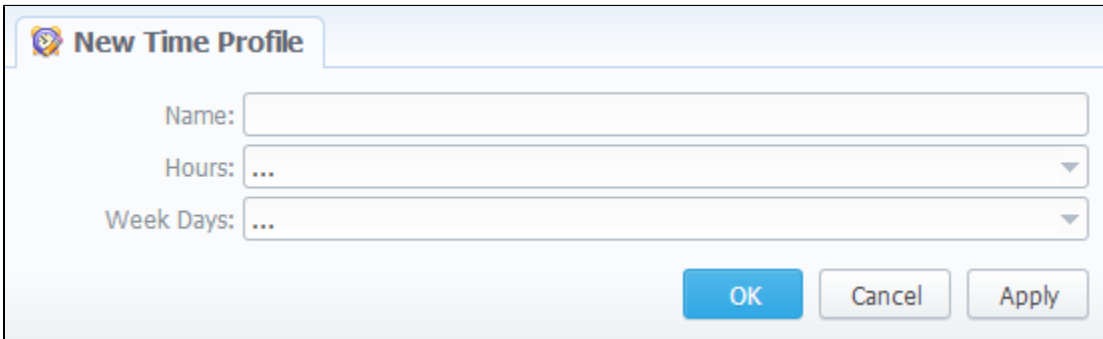


ID	Name		
1	all time		
3	business time		
4	non-business time		
2	weekends		

Adding New Time Profile

You can add new time profile by pressing "New Time Profile" button. A dialog-window will show-up:

Screenshot: Adding new time profile



New Time Profile

Name:

Hours: ...

Week Days: ...

You must enter name of new profile in the "Name" field, specify time in "Hours" section, and days of the week in "Week Days", then press "OK" button. Also, you can use "check all" and "uncheck all" options for selection.

Taxes Profiles

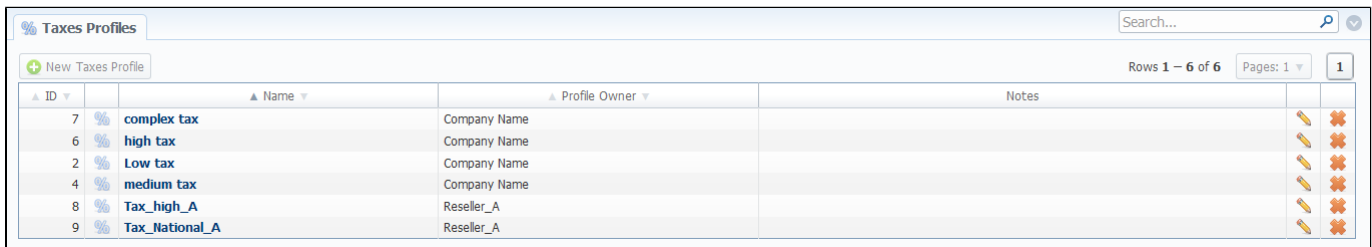
On this page

- [Taxes Profiles List](#)
- [Creating New Taxes Profile](#)
- [Adding Taxation Rules](#)

Taxes Profiles List

This section allows you to create so-called tax profiles, a set of taxation rules that could be applied to your rate tables in different taxation schemes.

Screenshot: Taxes Profiles section main window



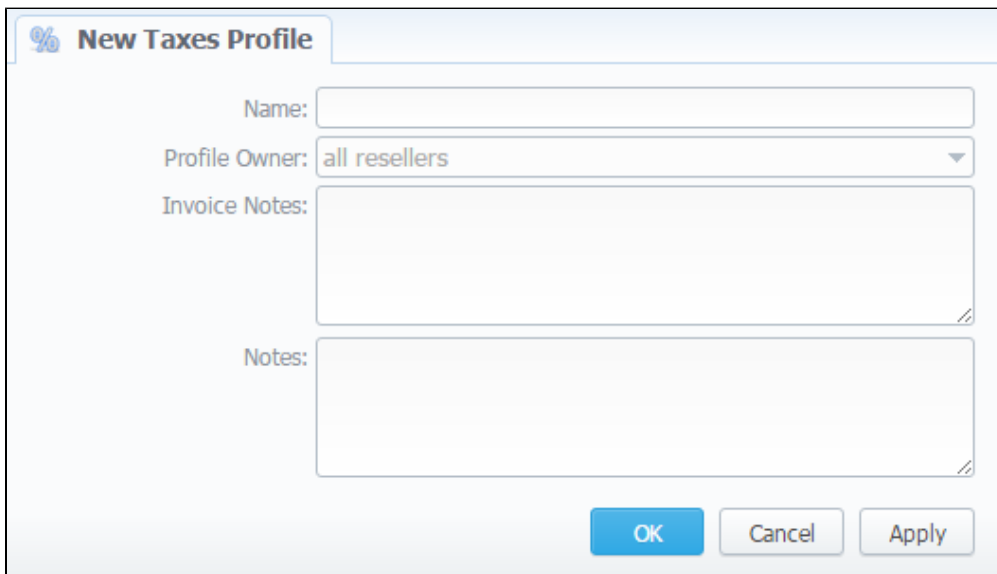
ID	Name	Profile Owner	Notes
7	complex tax	Company Name	
6	high tax	Company Name	
2	Low tax	Company Name	
4	medium tax	Company Name	
8	Tax_high_A	Reseller_A	
9	Tax_National_A	Reseller_A	

Creating New Taxes Profile

To create new profile click "New Taxes Profile" button and fill mandatory fields, specify a name and Reseller-owner of current profile. Also, you can add notes and invoice notes.

The "Invoice notes" field consists of information about tax profile and it will be specified in invoiced.

Screenshot: "New Taxes Profile" window



New Taxes Profile


Name:

Profile Owner:

Invoice Notes:

Notes:

Adding Taxation Rules

To add a taxation rules, you need to click  icon near the name of profile in the list. In the pop-up window you can add new rule by clicking "Add Tax Value" button or edit already existed tax rule.

Here you can specify current tax name, a percent value, an effective start date and priority.

Screenshot: "Edit Tax Values" window

Name	Value, %	Effective From	Rate Group	Priority	
basic	15	2014-10-28 00:00:00+00	Default	1	✖
additional	5	2014-10-28 00:00:00+00	Default	2	✖
national	3	2014-10-28 00:00:00+00	Default	3	✖

Tip: Priority is a way to build more complex tax schemes than simple "add % of tax to operation sum".

In cases when you determine a priority status, you set the order of the taxation. So *the tax with Priority 1* will add tax % to operation sum, the *tax with Priority 2* will add tax % to the resulted sum (operation sum + 1st tax %). Each following priority will add tax % to operation sum plus all previous priorities values.

For example:

If operation sum is 100 USD, and there is single tax with priority 1 and value of 10%, the taxation result will be 10 USD, so full operation plus tax is 110 USD.

If there are two taxes with priorities of 1 and 2, and respective values of 10% and 20%, then first tax yield will be 10 USD, and second tax yield will be 22 USD (because 20% is calculated from sum of operation + previous tax), and total will be $100 + 10 + 22 = 132$ USD.

You can not delete or archive a tax profile assigned to the *Client, Call shop, Reseller, Calling card*

Invoices Templates

On this page

- [Invoices Templates List](#)
- [Creating New Invoice Template](#)
- [The method of calculating and rounding values](#)

Invoices Templates List

This tool allows you to create invoice templates, for usage under different circumstances. For example, you may create a customized invoice according to the needs of company. To open this section, go to the *Configuration – Invoices Templates* section and proceed with browsing default templates or creating a new one (see screenshot below).

Screenshot: Invoices Templates section main window

ID	Name	Type	Reseller	Notes
22	default	PDF	all resellers	
34	all [variables]	PDF	all resellers	
11	All variables	PDF	ASIA	
13	All Variables origin	PDF	all resellers	

Creating New Invoice Template

When creating new template, you need to choose the type of a template. Currently there are **two types – xls and pdf**. For creating new template, click the respective button: **"New PDF Template"** or **"New XLS Template"**.

Screenshot: Example of XLS invoice template

The dialog box contains the following fields and options:

- Name: [Text Input]
- Reseller: [Dropdown]
- Anonymized Codes: [Dropdown]
- Locale: English [Dropdown]
- Totals Calculation: Round then sum [Dropdown]
- Taxes Calculation: Percent from total amount [Dropdown]
- Attach CDRs list to the invoice
- EXCEL TEMPLATE PARAMETERS:
 - CDRs List Format: csv [Dropdown]
 - Choose Call Type: To display all calls [Dropdown]
 - Select Columns: Call Time x Code Name x Code x [Dropdown]
 - Include packages charges to invoice
- Statistics Columns: [Dropdown]
- Template: default [Dropdown]
- Notes: [Text Area]
- Buttons: OK, Close, Apply

Section	Fields Description	
General Information	General information about the invoice template	
	<ul style="list-style-type: none"> • Name 	Unique invoice template name to differentiate invoice templates
	<ul style="list-style-type: none"> • Reseller 	Reseller who owns this invoice template
	<ul style="list-style-type: none"> • Anonymized Codes 	Codes which will have hidden numbers in invoice
<ul style="list-style-type: none"> • Locales 	Language for text representation of totals in invoice	

	<ul style="list-style-type: none"> • Totals Calculation 	<p>The order of rounding while calculating the totals:</p> <ul style="list-style-type: none"> • round then sum, that means raw values are rounded first according to the currency settings, then are summed; • sum then round, that means raw values are summed first, then are rounded. 	
	<ul style="list-style-type: none"> • Taxes Calculation 	<p>The way how taxes will be calculated:</p> <ul style="list-style-type: none"> • percent from total amount, that means taxes are calculated as a percentage from the total amount; • sum of individual taxes, that means taxes are calculated as a sum of respective taxes. 	
	<ul style="list-style-type: none"> • "Attach CDRs list to the invoice" check box 	<p>If enabled, creates CDR file for invoicing period and attaches it to invoice</p>	
		<ul style="list-style-type: none"> • CDRs List Format 	<p>List of CDR file format (csv or xls)</p>
		<ul style="list-style-type: none"> • Choose call type 	<p>Types of calls that will be included in invoices:</p> <ul style="list-style-type: none"> • to display all calls, i.e. calls with zero duration, buzy, error and no channel, successful calls; • to display non-zero calls, i.e. calls with duration equal to 1 second or more than 1 second.
	<ul style="list-style-type: none"> • Select Columns 	<p>List of columns which can be presented in attached CDR file</p>	
	<ul style="list-style-type: none"> • Notes 	<p>Additional information concerning the invoice template</p>	
Excel Template Parameters	Settings of invoice template		
	<ul style="list-style-type: none"> • Statistics Columns 	<p>List of statistics columns. If selected, the invoice will include summary statistics with selected columns</p>	
	<ul style="list-style-type: none"> • Template 	<p>Defined displaying format of CDRs list in a template</p>	

Screenshot: Example of an invoice PDF template

Invoices Templates

Name:

Reseller:

Anonymized Codes:

Locale: English

Totals Calculation: Round then sum

Taxes Calculation: Percent from total amount

Attach CDRs list to the invoice

Notes:

EDIT PDF TEMPLATE

HTML | | Paragraph | Font family | Font size

Path: p Words: 0

Invoice Settings

{number}
Invoice Number

{due_days}
To be paid within (days)

{due_date}
To be paid before (data)

{period_start}
Start Period: invoicing period start

{period_finish}
Finish Period: invoicing period finish

{date}
Date Of Invoice: actual invoice date

{tz}
Timezone

{group_notes}
Group notes

▶ Personal Data

▶ Stats Table

▶ Packages Table

▶ CDRs Table

▶ Custom Items Table

▶ Custom Taxes Table

▶ Financial Summary

▶ Global Totals

OK Close Apply

The process of creating new invoice PDF template is following:

- Add a table to your workspace, right-click on it and define table class (stats, cdrs, packages, package_fees, positions);
- Fill table with relevant information which should be present in invoice, by using functional variables, which you can pick from a list provided in same window at the right drop-down panels;
- After invoice template is created, fill in its name and click OK;
- Go to *Management – Resellers*, and in reseller's properties select your invoice template. This will insure that all customers of this reseller will be using this template;
- When creating invoice in *Management – Invoices* you can switch invoice template prior generating an invoice.

JeraSoft VCS includes several default pdf templates, called *default* and *default extended*.

You can select the **Time format** (*H:M:S*) or (*M:S*) while creating a **new invoice template**. The default format is in minutes (*M*).

Please note, there is a package arrangement by numbers in **"Invoices"** and **"Invoices Templates"**. While generating invoices, the system sorts packages in invoices. The names of packages could include numerical symbols. Please use numerical symbols as *001 name*, *002 name*, etc. in names of packages. And avoid names with special symbols as *%001 name*, *-001 name*.

The method of calculating and rounding values

There are two features **"Totals Calculation"** and **"Taxes Calculation"** in the *Invoices Templates* that helps to avoid rounding issues with float numbers and missing cents.

Best practice example:

If you have the next parameters:

- calls with the cost: \$0.005 (the tax is \$0.00105)
- package with activation fee: \$ 7.1144 per month (the tax is \$1.494024)
- package with activation fee: \$ 5.1144 per month (the tax is \$1.074024)
- package with activation fee: \$ 3.1144 per month (the tax is \$0.654024)
- tax 21%

And you select respective options:

Round then sum and Percent from the total amount	Sum then round and Sum of individual taxes
<p>Then, it rounds specified above values in the invoice just like that:</p> <ul style="list-style-type: none">• calls - \$0.01• packages - \$7.11, \$5.11, \$3.11 <p>After it calculates the total amount ($\\$0.01 + \\$7.11 + \\$5.11 + \\3.11) = \$15.34. The total amounts are following:</p> <ul style="list-style-type: none">• amount without tax - \$15.34• tax - \$3.22 (15.34×0.21)• amount including tax - ($\\$15.34 + \\3.22) = \$18.56	<p>It takes specified above <i>not rounded values</i> and calculates the total amount ($\\$0.005 + \\$7.1144 + \\$5.1144 + \\3.1144) = \$15.3482.</p> <p>After, it rounds a received sum (\$15.3482) and the total amounts are following:</p> <ul style="list-style-type: none">• amount without tax - \$15.35• tax - \$3.22 ($1.494024 + 1.074024 + 0.654024 + 0.00105$)• amount including tax - ($\\$15.35 + \\3.22) = \$18.57

Therefore, it's less than \$0.01 cent from the total amounts. Totals may not match due to the selected option of the rounding method.

VoIP Gateways

VoIP Gateways List

This section allows you to configure and integrate all switches into billing via RADIUS or CDR-files upload.

Screenshot: VoIP Gateways section main window



ID	Name	RADIUS Server	Files Collector	Files Downloader	SIP Server
15	FS-Amsterdam 82.196.3.58	JeraSoft VCS Common	—	—	✘
14	FS-KSA-MOBILY 93.189.98.52	JeraSoft VCS Common	—	—	✘
16	LOCALHOST 127.0.0.1	Aloe MVTS Pro	—	—	✔
13	OS-KSA-MOBILY 93.189.98.51	JeraSoft VCS Common	—	—	✘

Adding New VoIP Gateway

To add a new switch click “New VoIP Gateway” button and specify parameters in a pop-up window with settings. You can access to the advanced settings by clicking the down arrow next to the name of respective section.

Screenshot: Adding new VoIP Gateway

Section	Fields And Descriptions	
General Information	General gateway and calls processing information	
	Name	VoIP gateway name
	IP Address	VoIP gateway IP-adress
	LNP Provider	Specify here a LNP provider
	Allowed For	Specify here, which resellers can use current VoIP gateway
	Group	Indicate the group that will be used for invoices and reports
	Code Deck	The selected code deck will be used to pick codes and destination names for Mobile Number Portability feature. By browsing information from selected code deck, VCS will be able to perform appropriate number translations, which are processed by current VoIP gateway.
	Click the down arrow next to the <i>General Information</i> to access advanced settings:	
	<ul style="list-style-type: none"> Ident Priority - a hierarchy of account identification (ex.: ip,name,ani) ORIG ANI Ident - originating calls ANI identification (options available: SRC number ext, SRC number bill, DST ext, DST number bill) TERM ANI Ident - terminating calls ANI identification (options available: SRC number ext, SRC number bill, DST ext, DST number bill) 	

	<ul style="list-style-type: none"> • "Rate ORIG calls by DstIn number" check box - activation/deactivation of originating calls processing by full phone number • "Rate TERM calls by DstOut number" check box - activation/deactivation of terminating calls processing by full phone number • "Rate calls only with "success" status" check box - activation/deactivation of processing of calls that have "success" end code
Files Downloader	Downloader settings
	<ul style="list-style-type: none"> • Type Specify port type (SSH or FTP)
	<ul style="list-style-type: none"> • Port Specify port for SSH or FTP
	<ul style="list-style-type: none"> • Login Gateway server login (default value is "root")
	<ul style="list-style-type: none"> • Password Password is required for FTP integration. For SSH you have to create SSH-keys
<ul style="list-style-type: none"> • From path Specify CDR-files path (mask paths are allowed)	
Files Collector	<i>File Collectors</i> gather call data from CDR-files (activate this option if you plan to use integration via CDR-files)
	<ul style="list-style-type: none"> • Collector Type Which collector type should be used
	Click the down arrow  next to the <i>Files Collector</i> to access advanced settings: <ul style="list-style-type: none"> • Overwrite TZ - timezone selection (if you select a different timezone, system will ignore a timezone stored in CDRs-file and use current value) • "Skip Zero Calls" check box - activation/deactivation of zero duration calls ignoring • "Skip Released Calls" check box - activation/deactivation of released calls ignoring
RADIUS Server	<i>RADIUS Collectors</i> gather call data from RADIUS-server via RADIUS-protocol (activate this option if you plan to use integration via RADIUS-protocol)
	<ul style="list-style-type: none"> • Collector Type Which collector type should be used
	<ul style="list-style-type: none"> • Secret RADIUS-server password
	Click the down arrow  next to the <i>RADIUS Server</i> to access advanced settings: <ul style="list-style-type: none"> • Overwrite TZ - timezone selection (if you select a different timezone, system will ignore a timezone information stored in CDR file and use current value) • "Track Active Calls" check box - activation/deactivation the display of active calls in Active Calls section • "Skip Zero Calls" check box - activation/deactivation of zero duration calls ignoring • "Skip Released Calls" check box - activation/deactivation of released calls ignoring • "Collect Accounting Data" check box - if disabled, information from STOP packets will not be collected by database and <i>Radius Accounting</i> will be used only for <i>Active Calls monitoring</i>. If enabled, information from STOP packets will be collected by database.
SIP Server	Allows acceptance of SIP packets from current gateway. Required for SIP Redirect routing feature
	<ul style="list-style-type: none"> • Collector Type Which collector type should be used

- **Collector Type**

Files Downloading History

To view files downloading history, open the "Downloads History" tab. Also, you can remove files from the list by selecting them and clicking the "Delete" button on the toolbar.

Screenshot: Downloads History tab

ID	Name	Filename	Download Date	File size
242	Example 1	20160621_081601	21.06.2016 08:40:13 +0000	7619.7 Kb
243	Example 2	20160621_070836	21.06.2016 08:40:12 +0000	35816.19 Kb
244	Example 3	20160621_080035	21.06.2016 08:40:10 +0000	68.79 Kb

Knowledge Base Articles

- [How to set up a functional capacity?](#)
- [How to add a new gateway to VCS?](#)

Settings

This section is used to manage system notify messages distribution, and specifying system time and date format. The main window is presented on screenshot:

Screenshot: Settings section main window

SYSTEM SETTINGS

Default Currency:	USD	Select which currency is the default one, it will be used for generation of routing tables and matching of profitability margin.
Domain name:		Domain name field (It should always start with "https://" and should not be empty!)
Public IP:		The system's public IP address used for LNP DIP requests. This field is mandatory if LNP is enabled in the system.
Default language:	English	Choose which language will be selected by default on login screen
Timezone:	UTC	Default system timezone, you can change timezone in statistic reports queries
Statistics processing order:	old calls first	Order of statistics processing when the queue is large
Calculator workers:	4	Number of threads processing calculator tasks (number of CPU cores / 2).
Calculator mode:	periodically run	Select calculator processing mode: periodic - runs every X minutes by Tasks Scheduler, faster processing bulk of CDRs, but causes some delay realtime - processes calls in realtime, slower processing in case of CDRs bulks, only if you really need realtime
<input checked="" type="checkbox"/> Enable clients panel		Enables client's access to control panel with rates and statistics at /clients/
Default PIN Length:	6	For Calling Cards only - default length of PIN code for generated cards

MAIL SERVER SETTINGS

Host:		Hostname or IP address of SMTP server
Port:	Plain	Port/Security of SMTP server
From:		Specify e-mail address to send mail from, it is system address for the SMTP server, not the one that appears in From field in e-mails
Login:		login of SMTP server (if login and password fields are empty, no authentication)
Password:		Password of SMTP server

OUTPUT AND IMPORT/EXPORT

Date Format:	%m/%d/%Y	Output format for dates, you can check syntax for this field in the User Manual
Datetime Format:	%m/%d/%Y %H:%M:%S %z	Output format for datetimes, you can check syntax for this field in the User Manual
Items Per Page:	20	Default number of items per page in system interfaces.
CSV Delimiter:	,	Default delimiter used for CSV files when importing/exporting
CSV Decimal Point:	,	What will be used as decimal separation point for numbers ("," - for most cases)
Close rates marked by:	delete, block, close	When importing rate table, if some rates have notes that they are closed, system will close the appropriate destinations after importing them. This field defines what marking words should be taken as ones closing a rate. System also search for longer words, for example: close - closed, delete - deleted, etc. Please avoid sentences and use only single words, separated by comma (block; close).
Hidden Numbers:	4	Number of digits which should be hidden in destinations number
Output Encoding:	UTF-8	Encoding, that will be used during exporting data to file.
Import Encoding:	UTF-8	Encoding, that will be used during importing data from file.

INVOICING SETTINGS

Invoice No Template:		Format for Invoices No, you can use next replacements: %Y - current year, %m - current month, %d - current day, %C - client ID, %N - client name, %x - system incremental integer, %X - reseller incremental integer
Invoice Last No:		Last Invoice No used in system for generation of invoices
Autoinvoicing Default State:	to verify	Default state for all automatically created invoices.
Default invoice fields:	Country x Code Name x Rate x Minutes x Cost x	List of fields that will be selected by default during invoices generation. Same fields will be used during auto-invoicing generation.
Autoinvoicing Delay:	0 hour(s)	Time in hours from end of previous day to wait before invoicing. Required to be positive integer, otherwise system will invoice customer before the moment of full statistics process. Recommended value is around 5-6 hours.
<input type="checkbox"/> Check for empty code names in invoices		In case invoice template shows code names, but the field "Code Name" is not presented in Rate table of a client, invoice will not be generated.
<input type="checkbox"/> Allow zero invoices		Enables creation of zero invoices.
CDR fields for invoices:	Call Time x Code Name x Code x DST Number x Billed Time x Rate x Cost x	List of fields that will be selected by default when adding CDR-list to invoice. Same fields will be used during auto-invoicing generation.

RADIUS SERVER

Bind to address:		Specify your server IP addresses (separated by comma) to bind to, empty field means bind to all addresses.
Accounting port:		Listen for accounting packets on specified port
Authorization port:		Listen for authorization packets on specified port, same for dynamic routing if available
Number of workers:		Number of threads that process packets. The value of this parameter also affects on numbers of SIP workers.
Max call length:		Maximum call duration in seconds, for customers in postpaid mode.
Changes will be only applied after you restart RADIUS server from Task Scheduler section)		

SIP SERVER

SIP port:		Listen for auth packets on specified port.
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DYNAMIC ROUTING

Analyze Period:	300 minute(s)	What amount of last minutes of statistics will be analyzed to build a routing table.
<input type="checkbox"/> Log empty routes		Enable to get messages to Events Log about zero-routes (degrades performance)

NOTIFICATION AND MONITORING

<input checked="" type="checkbox"/> Event on missing account		Send event to events log, when client/account was not identified during processing of CDRs or RADIUS Authorization
<input checked="" type="checkbox"/> Event on missing rate		Send event to events log, when destination/rate was not identified during processing of CDRs or RADIUS Authorization
<input type="checkbox"/> Event on zero time calls		Send events even if call has zero length
Resend low-balance events every:	0 hour(s)	How often to resend e-mail regarding low customer's balance
Rate changes notification period:	0 hour(s)	Customer will be informed regarding rates changes in given amount of hours after the actual change.
Period to notify future changes:	30 day(s)	Customer will be informed about rates for next X days.
Watch for free space at:		Monitor free disk space, you can specify full path where to monitor and percent of space delimited by ";". When free space will be less than specified percent of whole disk size - system will send alert.
Message Limit for Events Confir:	5	Sends all messages from one worker in single e-mail, if message count is larger than

Message size for Events Log: specified amount

AUTO-ROTATION AND CLEANING

Delete events from log after:	<input type="text" value="1"/> day(s) (from 1 to 90)	Delete events from Events Log after specified period of days.
Statistics archiving delay:	<input type="text" value="1"/> day(s) (0 - do not archive)	Archive statistics in advance. Each day minimize time needed for backup.
Statistics rotate delay:	<input type="text" value="100"/> day(s) (0 - do not rotate)	Rotate statistics to archive after specified number of days.
Delete not actual rates after:	<input type="text" value="360"/> day(s) (0 - do not delete)	Delete rates from system, when they are not actual and effective date is older than specified number of days.
Delete parsed CDR-files after:	<input type="text" value="180"/> day(s) (0 - do not delete)	After what number of days already parsed and processed CDR-files should be deleted from local server.
Delete archived log-files after:	<input type="text" value="90"/> day(s) (0 - do not delete)	After what number of days archived log-files should be deleted from local server.
Delete DIDs history from log after:	<input type="text" value="89"/> day(s) (from 1 to 90)	Delete DIDs history from DIDs history after specified period of days.

BACKUP SETTINGS

System backup period:	<input type="text" value="0"/> hour(s) (0 - do not backup)	How often to backup system, please note that actual backup will be done at the time when Backup Manager process runs.
Number of Backup Manager workers:	<input type="text" value="1"/>	Number of threads that run database backup.
Destination for backup packages:	<input type="text" value=""/>	Absolute path where to put backup packages, it can not be inside root of VCS system.
Leave last X packages:	<input type="text" value="3"/>	How many last backup packages to leave.

[Update](#)

System Settings

Timezone and system's mail server parameters are specified here (Screenshot):

Screenshot: System Settings window

SYSTEM SETTINGS	
Default Currency:	<input type="text" value="USD"/> <small>Select which currency is the default one, it will be used for generation of routing tables and matching of profitability margin.</small>
Domain name:	<input type="text" value="http://"/> <small>Domain name field (It should always start with "https://" and should not be empty!)</small>
Default language:	<input type="text" value="English"/> <small>Choose which language will be selected by default on login screen</small>
Timezone:	<input type="text" value="UTC"/> <small>Default system timezone, you can change timezone in statistic reports queries</small>
Statistics processing order:	<input type="text" value="new calls first"/> <small>Order of statistics processing when the queue is large</small>
Re-rating mode:	<input type="text" value="actual"/> <small>Select calculator re-rating mode: actual – calls are processed based on the client's current state historic – calls are processed based on the clients's state at the time of the call</small>
Calculator workers:	<input type="text" value="1"/> <small>Number of threads processing calculator tasks (number of CPU cores / 2).</small>
Calculator mode:	<input type="text" value="periodically run"/> <small>Select calculator processing mode: periodic – runs every X minutes by Tasks Scheduler, faster processing bulk of CDRs, but causes some delay realtime – processes calls in realtime, slower processing in case of CDRs bulks, only if you really need realtime</small>
<input checked="" type="checkbox"/> Enable clients panel	<small>Enables client's access to control panel with rates and statistics at /clients/</small>
Default PIN Length:	<input type="text" value="12"/> <small>For Calling Cards only — default length of PIN code for generated cards</small>

Field	Description
Default Currency	Specify currency that will be used as default for generation of routing
Domain Name	Enter relevant domain address of your VCS server. In most cases, VCS IP address should be entered here. Please note, if this name is specified incorrectly, you may experience issues with reseller logos display
Default Language	Select default language
Timezone	Select default timezone
Statistics processing order	Specify what statistics to process first (newer or older)
Re-rating mode	Select the calculator re-rating mode: <ul style="list-style-type: none"> actual – calls are processed based on the <i>Client's current state</i> (note, this mode is set by default) historic – calls are processed based on the <i>Client's state at the time of the call</i>
Calculator workers	Specify number of threads processing calculator tasks (number of CPU cores / 2)
Calculator mode	Defines the calculator workout, whether is will start periodically through Task Scheduler, or will be constantly running
"Enable client's panel" Checkbox	Switch customer's interface on/off with one click
Default PIN length	Sets the default length of PIN-code when creating calling card series

Mail Server Settings

Here you can specify mail server settings (Screenshot):

Screenshot: Mail Server Settings window

The screenshot shows a window titled "MAIL SERVER SETTINGS" with the following fields and descriptions:

Field	Description
Host: localhost	Hostname or IP address of SMTP server
Port: 25 Plain	Port/Security of SMTP server
From: billbery@localhost.ru	Specify e-mail address to send mail from, it is system address for the SMTP server, not the one that appears in From field in e-mails
Login:	login of SMTP server (if login and password fields are empty, no authentication)
Password:	Password of SMTP server

Field	Description
Host	Mail server address that is used by system
Port	Specify port and security type of SMTP server (Plain, TLS, SSL)
From	The e-mail address that will be specified as sender
Login	Login for SMTP server
Password	Password for SMTP server

Output and Import / Export

Here you can specify output and import / export parameters, including time and date parameters configuration (Screenshot):

Screenshot: Output and Import / Export settings window

OUTPUT AND IMPORT/EXPORT	
Date Format:	<input type="text" value="%d/%m/%Y"/> Output format for dates, you can check syntax for this field in the User Manual
Datetime Format:	<input type="text" value="%d/%m/%Y %H:%M:%S %z"/> Output format for datetimes, you can check syntax for this field in the User Manual
Items Per Page:	<input type="text" value="20"/> Default number of items per page in system interfaces.
CSV Delimiter:	<input type="text" value=","/> Default delimiter used for CSV files when importing/exporting
CSV Decimal Point:	<input type="text" value=","/> What will be used as decimal separation point for numbers ("," - for most cases)
Close rates marked by:	<input type="text" value="delete, block, close"/> When importing rate table, if some rates have notes that they are closed, system will close the appropriate destinations after importing them. This field defines what marking words should be taken as ones closing a rate. System also search for longer words, for example: close - closed, delete - deleted, etc.
Hidden Numbers:	<input type="text" value="4"/> Number of digits which should be hidden in destinations number
Output Encoding:	<input type="text" value="Windows-1251"/> Encoding, that will be used during exporting data to file.

Field	Description
Date Format	Specify date parameters here
	<ul style="list-style-type: none"> • %d Day of the month in numeric form. Allowed values: from 01 to 31
	<ul style="list-style-type: none"> • %m Month number. Allowed values: from 01 to 12
	<ul style="list-style-type: none"> • %Y Number of the year, that consists of 4 numbers. Value example: 1999, 2005, 2010
Datetime Format	Specify datetime parameters here
	<ul style="list-style-type: none"> • %d Day of the month in numeric form. Allowed values: from 01 to 31
	<ul style="list-style-type: none"> • %m Month number. Allowed values: from 01 to 12
	<ul style="list-style-type: none"> • %Y Number of the year, that consists of 4 numbers. Value example: 1999, 2005, 2010
	<ul style="list-style-type: none"> • %H Hours in 24-hour format with leading zeroes. Allowed values: from 00 to 23
	<ul style="list-style-type: none"> • %M Minutes with leading zeroes. Allowed values: from 00 to 59
	<ul style="list-style-type: none"> • %S Seconds with leading zeroes. Allowed values: from 00 to 59
	<ul style="list-style-type: none"> • %z Timezone settings
Items Per Page	Set default quantity of items displayed on a single page
CSV Delimiter	Set default delimiter for CSV files

CSV Decimal Point	Set default decimal point for CSV files
Close rates marked by	When importing rate sheets system will be able to close respective rates, if <i>Rate Changes</i> column has one of the key-words entered here
Hidden numbers	Specify how many digits of a number should be hidden, when this function is activated for a customer
Output Encoding	Select which encoding to use when exporting a file

Invoicing Settings

Invoicing settings are grouped here (Screenshot):

Screenshot: Invoicing Settings window

INVOICING SETTINGS		
Invoice No Template:	<input type="text" value="%d%m%Y-%x"/>	Format for Invoices No, you can use next replacements: %Y - current year, %m - current month, %d - current day, %C - client ID, %N - client name, %x - system incremental integer, %X - reseller incremental integer
Invoice Last No:	<input type="text" value="Stag-747-522"/>	Last Invoice No used in system for generation of invoices
Autoinvoicing Default State:	<input type="text" value="to send"/>	Default state for all automatically created invoices.
Default invoice fields:	<input type="text" value="Country"/> × <input type="text" value="Code Name"/> × <input type="text" value="Rate"/> × <input type="text" value="Minutes"/> × <input type="text" value="Cost"/> ×	List of fields that will be selected by default during invoices generation. Same fields will be used during auto-invoicing generation.
Autoinvoicing Delay:	<input type="text" value="0"/> hour(s)	Time in hours from end of previous day to wait before invoicing. Required to be positive integer, otherwise system will invoice customer before the moment of full statistics process. Recommended value is around 5-6 hours.
<input type="checkbox"/>	Check for empty code names in invoices	In case invoice template shows code names, but the field "Code Name" is not presented in Rate table of a client, invoice will not be generated.
CDR fields for invoices:	<input type="text" value="Call Date"/> × <input type="text" value="Code Name"/> × <input type="text" value="Code"/> × <input type="text" value="Dst Number"/> × <input type="text" value="Billed Time"/> × <input type="text" value="Rate"/> × <input type="text" value="Cost"/> ×	List of fields that will be selected by default when adding CDR-list to invoice. Same fields will be used during auto-invoicing generation.

Field	Description
Invoice No Template	Default template for invoice number
Invoice Last No	Number of last issued invoice
Autoinvoicing Default State	You can set the state (such as <i>normal</i> , <i>to sent</i> or <i>to verify</i>) for all automatically created invoices
Default invoice fields	You can select the displayable fields in automatically generated invoices here. This is used by autoinvoicing feature – if you don't use the autoinvoicing, you may ignore this setting
Autoinvoicing Delay	Time in hours system will wait until doing invoicing
"Check empty code names in invoices" checkbox	Enables checking of the correspondence of a <i>Code</i> with a <i>Code name</i> , and in case of finding some mismatching the system will give an alert and invoice will be not generated
CDR fields for invoices	Select default fields that should be in CDR list which is attached to invoices

RADIUS Server

VCS RADIUS server settings can be changed here (Screenshot):

Screenshot: RADIUS Server settings window

RADIUS SERVER

Bind to address:	<input type="text" value="127.0.0.1"/> empty - bind to all	Specify your server IP addresses (separated by comma) to bind to, empty field means bind to all addresses.
Accounting port:	<input type="text" value="1813"/>	Listen for accounting packets on specified port
Authorization port:	<input type="text" value="1812"/>	Listen for authorization packets on specified port, same for dynamic routing if available
Number of workers:	<input type="text" value="2"/>	Number of threads that process packets. The value of this parameter also affects on numbers of SIP workers.
Max call length:	<input type="text" value="7200"/>	Maximum call duration in seconds, for customers in postpaid mode.

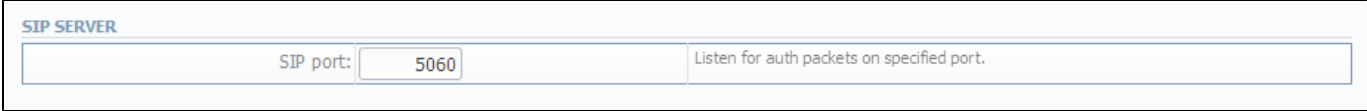
Changes will be only applied after you restart RADIUS server from Task Scheduler section)

Field	Description
Bind to address	Specify your VCS server IP addresses, separated by comma to bind RADIUS to
Accounting port	Specify accounting port here (default is 1813)
Authorization port	Specify authorization port here (default is 1812)
Number of workers	Number of RADIUS workers. The value of this parameter also affects on SIP workers' number.
Max call length	Limit maximum call length in seconds

SIP Server

SIP Server settings can be changed here (Screenshot):

Screenshot: SIP Server settings window



The screenshot shows a settings window titled "SIP SERVER". It contains a single input field with the label "SIP port:" and the value "5060". To the right of the input field is a descriptive text: "Listen for auth packets on specified port."

Fields	Description
SIP Port	Specify a SIP port that system should listen to

Dynamic Routing

Dynamic routing settings can be altered here (Screenshot):

Screenshot: Dynamic Routing settings window

DYNAMIC ROUTING

Analyze Period: <input style="width: 50px;" type="text" value="300"/> minute(s)	What amount of last minutes of statistics will be analyzed to build a routing table.
<input type="checkbox"/> Log empty routes	Enable to get messages to Events Log about zero-routes (degrades performance)

Field	Description
Analyze Period	An amount of minutes of last available statistics that will be used to build routing table
"Log empty routes" Checkbox	Enable to get log messages regarding zero routes

Notification and Monitoring

Notify messages distribution and other monitoring settings are configured here (Screenshot):

Screenshot: Notification and Monitoring settings window

NOTIFICATION AND MONITORING		
<input checked="" type="checkbox"/>	Event on not found account	Send event to events log, when client/account was not identified during processing of CDRs or RADIUS Authorization
<input checked="" type="checkbox"/>	Event on not found tariff	Send event to events log, when destination/rate was not identified during processing of CDRs or RADIUS Authorization
<input type="checkbox"/>	Event on zero time calls	Send events even if call has zero length
Resend low-balance events every:	<input type="text" value="24"/> hour(s)	How often to resend e-mail regarding low customer's balance
Rate changes notification period:	<input type="text" value="5"/> hour(s)	Customer will be informed regarding rates changes in given amount of hours after the actual change.
Period to notify future changes:	<input type="text" value="7"/> day(s)	Customer will be informed about rates for next X days.
Watch for free space at:	<input type="text" value="/usr/local:20;/var/lib/pgsql:30"/>	Monitor free disk space, you can specify full path where to monitor and percent of space delimited by ":". When free space will be less than specified percent of whole disk size - system will send alert.
Message Limit for Events Config:	<input type="text" value="5"/>	Sends all messages from one worker in single e-mail, if message count is larger than specified amount

Field	Description
"Event on not found account" Checkbox	Activates/deactivates notify sending when no account was found
"Event on not found tariff" Checkbox	Activates/deactivates notify sending when no rate was found
"Event on zero time calls" Checkbox	Activates/deactivates all previous checkboxes effects when calls with zero duration were found
Resend low balance events every, hour(s)	Resend low balance notification once in a specified period
Rate changes notification period, hour(s)	Specify amount of time which needs to pass after actual rate change, so notification will be sent
Period to notify future changes, day(s)	Specify number of days, for customer to beinformed about rate change in advance
Watch for free space at	Here you can specify folders that will be monitored for available disk space. To add a folder, specify its path, and by using ":" sign choose the percent of disk space, below which the system will send warning notifies For example - /usr/local/:20 means that if free disk space is below 20 percent in folder /usr/local/ the notify will be sent. You can add multiple folders in this field by delimiting them with ";" sign
Message Limit for Events Config	Specify how many same type messages shall be included into single email. If generated messages number is less than specified, each message will be sent in separate email

Auto-rotation and Cleaning

Automatic statistics and backup management parameters are configured here (Screenshot):

Screenshot: Auto-rotation and Cleaning settings window

AUTO-ROTATION AND CLEANING		
Delete events from log after:	<input type="text" value="1"/> day(s) (from 1 to 90)	Delete events from Events Log after specified period of days.
Statistics archiving delay:	<input type="text" value="1"/> day(s) (0 - do not archive)	Archive statistics in advance. Each day minimize time needed for backup.
Statistics rotate delay:	<input type="text" value="100"/> day(s) (0 - do not rotate)	Rotate statistics to archive after specified number of days.
Delete not actual rates after:	<input type="text" value="360"/> day(s) (0 - do not delete)	Delete rates from system, when they are not actual and effective date is older than specified number of days.
Delete parsed CDR-files after:	<input type="text" value="180"/> day(s) (0 - do not delete)	After what number of days already parsed and processed CDR-files should be deleted from local server.
Delete archived log-files after:	<input type="text" value="90"/> day(s) (0 - do not delete)	After what number of days archived log-files should be deleted from local server.
Delete DIDs history from log after:	<input type="text" value="89"/> day(s) (from 1 to 90)	Delete DIDs history from DIDs history after specified period of days.


Field	Description
Delete events from log after	Here you can specify the number of days in which events will be removed from the log-files (when 0 is the value – events won't be deleted)
Statistics archiving delay	Here it's possible to archive the statistics in advance to reduce the backup time.
Statistics rotate delay	Statistics packages rotation delay (for example, if you will enter "3" as a value here, all statistics packages that are older than 3 days will be automatically moved to archive)
Delete not actual rates after	Cleans non-actual rates from database when specified number of days passed
Delete parsed CDR-files after	Define when system should delete old parsed CDR-files
Delete archived log-files after	Define when system should delete archived log-files
Delete DIDs history from log after	Delete DIDs history from DIDs history after specified period of days

Backup Settings

Backup settings can be set here (Screenshot):

Screenshot: Backup Settings window

BACKUP SETTINGS	
System backup period: <input type="text" value="0"/> hour(s) (0 - do not backup)	How often to backup system, please note that actual backup will be done at the time when Backup Manager process runs.
Destination for backup packages: <input type="text"/>	Absolute path where to put backup packages, it can not be inside root of VCS system.
Leave last X packages: <input type="text" value="10"/>	How many last backup packages to leave.

Field	Description
System backup period	Period of time that specifies when system should backup itself (for example, if you enter 24 as a value, this will mean that that system will backup itself every 24 hours)
Destination for backup packages	Absolute path to the folder where system backup copies will be stored <div style="border: 1px solid red; padding: 5px; margin-top: 10px;"> Warning! This folder must not be within any system folders!</div>
Leave last X packages	Parameter, that specifies how many backup copies will be stored at one given time (for example, if you will enter 3 as a value here, then only three copies will be stored. When the fourth copy is added, the oldest one will be deleted)

System

This section of our Guide contains everything that relates to the *System* tab of JeraSoft VoIP Carrier Suite. For more details please go to the related subsections:

- [Events Log](#)
- [Audit Log](#)
- [Mail Queue](#)
- [System Status](#)
- [Task Scheduler](#)
- [API Testbed](#)
- [Users](#)
- [Roles](#)

Events Log

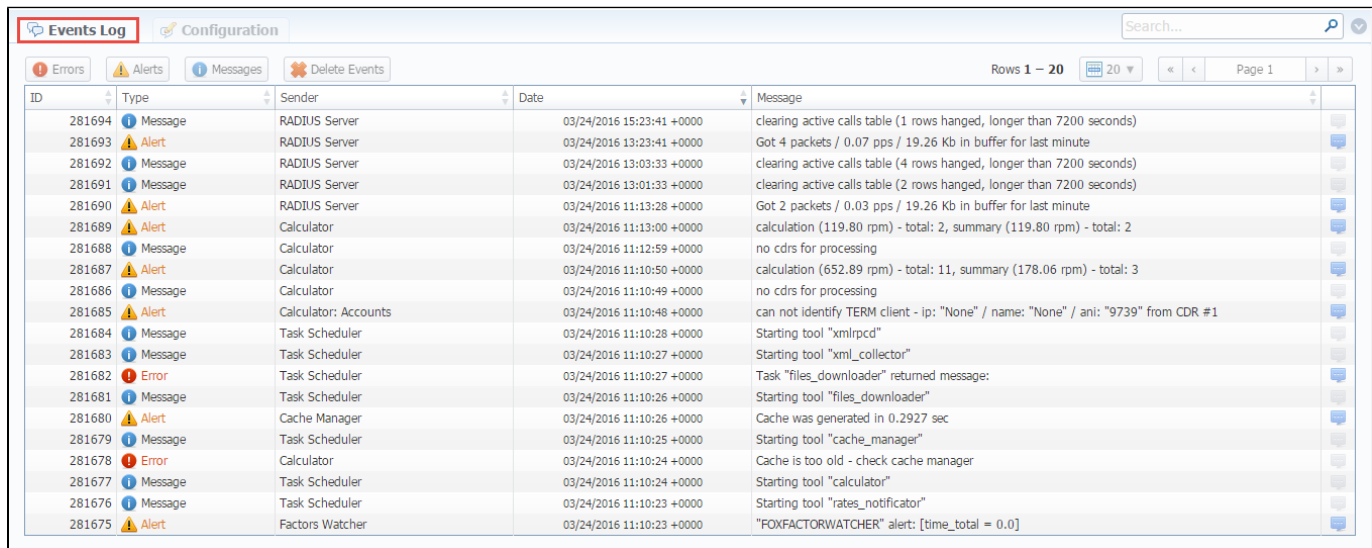
On this page

- [Events Log Section Main Window](#)
- [Configuration Section Tab](#)

Events Log Section Main Window




This section displays the list of all events recorded by the system. Examining the events in these logs can help to trace activities, errors and alert notifications.

Screenshot: Events Log section main window



ID	Type	Sender	Date	Message
281694	Message	RADIUS Server	03/24/2016 15:23:41 +0000	clearing active calls table (1 rows hanged, longer than 7200 seconds)
281693	Alert	RADIUS Server	03/24/2016 13:23:41 +0000	Got 4 packets / 0.07 pps / 19.26 Kb in buffer for last minute
281692	Message	RADIUS Server	03/24/2016 13:03:33 +0000	clearing active calls table (4 rows hanged, longer than 7200 seconds)
281691	Message	RADIUS Server	03/24/2016 13:01:33 +0000	clearing active calls table (2 rows hanged, longer than 7200 seconds)
281690	Alert	RADIUS Server	03/24/2016 11:13:28 +0000	Got 2 packets / 0.03 pps / 19.26 Kb in buffer for last minute
281689	Alert	Calculator	03/24/2016 11:13:00 +0000	calculation (119.80 rpm) - total: 2, summary (119.80 rpm) - total: 2
281688	Message	Calculator	03/24/2016 11:12:59 +0000	no cdrs for processing
281687	Alert	Calculator	03/24/2016 11:10:50 +0000	calculation (652.89 rpm) - total: 11, summary (178.06 rpm) - total: 3
281686	Message	Calculator	03/24/2016 11:10:49 +0000	no cdrs for processing
281685	Alert	Calculator: Accounts	03/24/2016 11:10:48 +0000	can not identify TERM client - ip: "None" / name: "None" / ani: "9739" from CDR #1
281684	Message	Task Scheduler	03/24/2016 11:10:28 +0000	Starting tool "xmlrpcd"
281683	Message	Task Scheduler	03/24/2016 11:10:27 +0000	Starting tool "xml_collector"
281682	Error	Task Scheduler	03/24/2016 11:10:27 +0000	Task "files_downloader" returned message:
281681	Message	Task Scheduler	03/24/2016 11:10:26 +0000	Starting tool "files_downloader"
281680	Alert	Cache Manager	03/24/2016 11:10:26 +0000	Cache was generated in 0.2927 sec
281679	Message	Task Scheduler	03/24/2016 11:10:25 +0000	Starting tool "cache_manager"
281678	Error	Calculator	03/24/2016 11:10:24 +0000	Cache is too old - check cache manager
281677	Message	Task Scheduler	03/24/2016 11:10:24 +0000	Starting tool "calculator"
281676	Message	Task Scheduler	03/24/2016 11:10:23 +0000	Starting tool "rates_notificator"
281675	Alert	Factors Watcher	03/24/2016 11:10:23 +0000	"FOXFACORWATCHER" alert: [time_total = 0.0]

There are few types of events:


Event	Description
	Errors
	Alerts
	Messages


In *Sender* row you can view the name of the system sender module (module, that sent the event).

Main window displays general list of events by default. You can filter them by types or groups by using search panel tools.

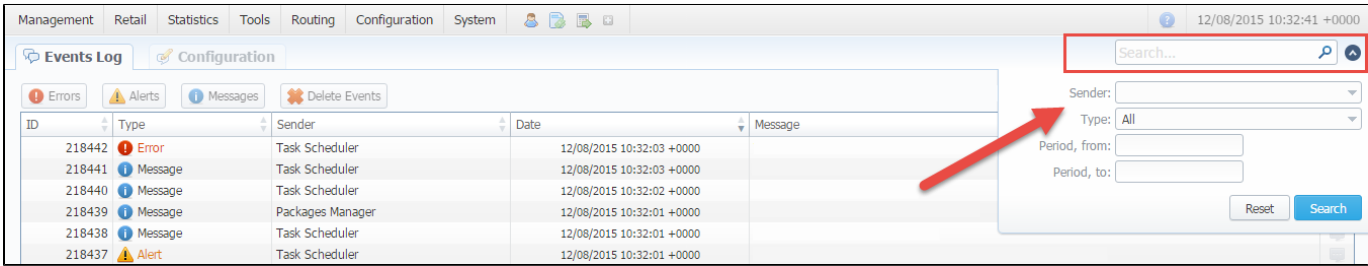
For example, system records following events:

- incoming or outgoing call client that is not registered within the system;
- phone number prefix not registered within system;
- incoming call price that is more than outgoing call price;
- incoming or outgoing call that was rejected;
- etc.

 **Warning!** When you click the "Delete Events" button, all events that satisfy current search query will be deleted from the system!

You can find the built-in **quick search toolbar** that provides an easy way of searching against multiple rows. Click the down arrow  on the toolbar to use the advanced settings.

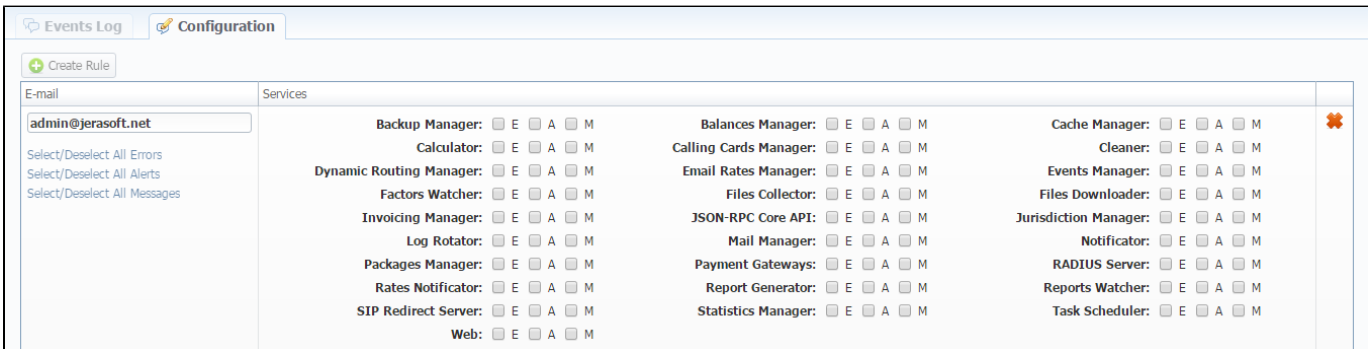
Screenshot: Events Log section/ Search panel



Configuration Section Tab

This section is used to inform system's users about all recorded events.

Screenshot: Configuration section tab main window



You may choose group and type of event, and specify an e-mail address to which notifications of the chosen type will be sent. You can add new set of empty fields by clicking the "Create Rule" button. You can confirm current configuration of events by clicking the "Update" button.

Audit Log

Audit Log List

This section displays detailed information concerning all actions performed by users in VCS with *Clients*, *Resellers*, *Accounts*, *Calling Cards* (see screenshot below):

Screenshot: Audit Log section main window

Modification Time	Item	Action	Changes	DB Action	User	Context
12/25/2014 14:15:27 +0000	Vendor A	Client Modification	Orig Rate Table ID: 3 Routing Plan ID: 3	UPDATE	Administrator	Web
12/25/2014 14:15:24 +0000	Vendor A	Client Creation	ID: 113 Reseller ID: 14 Name: Vendor A	INSERT	Administrator	Web
12/25/2014 14:03:14 +0000	Client1	Client Modification	Client Panel: true Login: client Password: 62608e08adc29a8d6dbc9754e659f125	UPDATE	Administrator	Web
12/25/2014 14:01:47 +0000	Cl_for_rates_analysis_2	Client Removal	Status: deleted ← active	UPDATE	Administrator	Web
12/25/2014 14:00:26 +0000	Client A	Client Modification	Groups: Customers	UPDATE	Administrator	Web
12/25/2014 14:00:26 +0000	Client A	Client Modification	Groups: Customers	UPDATE	Administrator	Web

Column	Description
Modification Time	Data and time of made actions or modifications
Item	The list of objects which were modified
Action	The list of made actions: creation, modification or removal
Changes	The list of changes and detailed information on what exactly were changed
DB Action	Actions made in database
User	This column shows the user name by whom manipulations were made
Context	In what way manipulations were made, i.e. using Web interface or API

Quick Search filters in *Audit Log* section main window helps in finding items and actions made over item (for instance, make filtration by clients which were modified etc.). To open this form click on arrow button.

Screenshot: Quick Search form

Modification Time	Item	Action	Changes	DB Action	User	Context
10/09/2014 09:51:09 +0000	Customer A	Client Modification	Orig Rate Table ID: 13 Routing Plan ID: 4			
10/09/2014 09:50:59 +0000	Customer 1	Client Removal	Status: deleted ← active			
10/09/2014 09:47:35 +0000	Customer 1	Client Creation	Orig Rate Table ID: 13 Routing Plan ID: 4	INSERT	demo	Web
10/09/2014 09:46:43 +0000	Customer A	Client Creation		INSERT	demo	Web
10/09/2014 09:39:28 +0000	Client1	Client Modification	Allowed Credit: 50.00 ← 10.00	UPDATE	demo	Web

Search...

Item Type: Clients

User: demo

Action:

Period: [] - []

Reset Search

In the case when a client, reseller etc. was fully deleted, there is a possibility to see a state of this object at the time of its removal, so called *Historic State*, by clicking on its name in *Item* column respectively.

Screenshot: Historic State window

Historic State
test_client

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Timezone:

Status:

Groups:

Tax Profile:

Bill Calls by:

Hidden Numbers

CLIENT PANEL

Login:

Password:

Access:

TERMINATOR SETTINGS

Rate Table:

Capacity: channels

ORIGINATOR SETTINGS

Allowed Credit: DKK

Payment Terms:

Rate Table:

Routing Plan:

Capacity: channels

LOW BALANCE NOTIFICATION

Notify Client: DKK

Notify Admin: DKK

AUTOINVOICING

Template:

Last Invoiced:

RATE NOTIFICATION

Format:

Notify type:

COMPANY INFO

Name:

Main E-mail:

NOC E-mail:

Billing E-mail:

Rates E-mail:

Address:

Tax ID:

Reg ID:

Account Details:

Locale:



If you change the **mail templates** in the **Reseller settings**, these updates will not be displayed in the *Audit logs*.

Mail Queue

Mail Queue section displays all system e-mails that were already sent or are waiting to be sent. Main window may look like on the screenshot below:


Screenshot: Mail Queue section main window



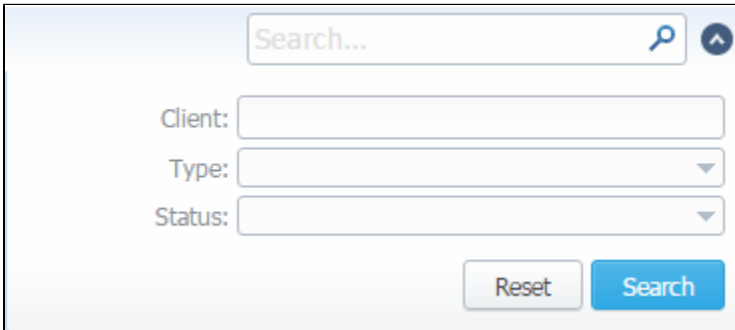
The screenshot shows the 'Mail Queue' section with a search bar at the top right. Below the search bar, it indicates 'Rows 1 - 20 of 24' and 'Page 1 of 2'. The table contains the following data:

ID	To	Subject	Type	Created
253	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:40:53 +0000
252	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:36:24 +0000
251	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:35:38 +0000
250	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:33:50 +0000
249	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:32:19 +0000
248	Orig_o_client mail@site.com	Rates notification from Company Name	Rates Notificator	06/24/2016 16:31:24 +0000

✔ These can be invoices, low balance notifications or other types of messages system sends in form of e-mails.

Use the **Quick Search** toolbar for fast investigation in this section. This tool makes a search filter to limit the search results for higher working efficiency. To open this form click on the down arrow 

Screenshot: Mail Queue search toolbar



The screenshot shows the search toolbar with the following elements:

- A search input field with the placeholder text 'Search...' and a magnifying glass icon.
- A 'Client:' label followed by a text input field.
- A 'Type:' label followed by a dropdown menu.
- A 'Status:' label followed by a dropdown menu.
- A 'Reset' button.
- A 'Search' button.

System Status

This section displays all currently launched system services, system load info and current system database sessions of the main server. In addition, this section displays the status of *Redundancy and Reporting servers* (see screenshot below):

Screenshot: System Status section main window

System Status
MASTER

LOCALHOST

CPU: 1 Core(s)
 LA: 0 / 0.01 / 0
 Memory: 1.83 GB / 1.54 GB
 Services: 4

ID	Service	Started on	Uptime		
24051	RADIUS Server	12/23/2014 23:01:19 +0000	17:40:08		
24152	SIP Redirect Server	12/23/2014 23:01:26 +0000	17:40:01		
24191	Calculator	12/23/2014 23:02:02 +0000	17:39:24		
23864	XML-RPC Server	12/23/2014 23:01:04 +0000	17:40:22		

Some processes can not be stopped via web interface, so you have to login on server via SSH to stop them.

MASTER DATABASE SESSIONS

ID	Application	Session Start	Query Start	Duration	Query
10993	webAdmin:demოსystem_status/info:	12/24/2014 16:41:26 +0000	12/24/2014 16:41:26 +0000	00:00:00	SELECT *, (now()-backend_start) AS duration FROM pg_stat_activity WHERE TRUE AND "datname" = 'vcs' AND "username" = 'vcs' ORDER BY "duration" ASC
10992	Calculator	12/24/2014 16:41:26 +0000	12/24/2014 16:41:26 +0000	00:00:00	SELECT 1
24207	Calculator	12/23/2014 23:02:02 +0000	12/24/2014 16:41:26 +0000	17:39:24	IDLE
24206	Calculator	12/23/2014 23:02:02 +0000	12/23/2014 23:02:02 +0000	17:39:24	IDLE
24205	Calculator	12/23/2014 23:02:02 +0000	12/23/2014 23:02:02 +0000	17:39:24	IDLE
24204	Calculator	12/23/2014 23:02:02 +0000	12/23/2014 23:02:02 +0000	17:39:24	IDLE
24203	Calculator	12/23/2014 23:02:02 +0000	12/23/2014 23:02:02 +0000	17:39:24	IDLE
24197	Calculator	12/23/2014 23:02:02 +0000	12/24/2014 16:41:26 +0000	17:39:24	IDLE
24190	Task Scheduler	12/23/2014 23:02:02 +0000	12/23/2014 23:02:02 +0000	17:39:24	IDLE
24158	SIP Redirect Server	12/23/2014 23:01:26 +0000	12/23/2014 23:01:26 +0000	17:40:00	IDLE
24157	SIP Redirect Server	12/23/2014 23:01:26 +0000	12/23/2014 23:01:26 +0000	17:40:00	IDLE
24154	SIP Redirect Server	12/23/2014 23:01:26 +0000	12/24/2014 16:40:57 +0000	17:40:00	IDLE
24059	RADIUS Server	12/23/2014 23:01:19 +0000	12/23/2014 23:01:19 +0000	17:40:07	IDLE
24058	RADIUS Server	12/23/2014 23:01:19 +0000	12/23/2014 23:01:19 +0000	17:40:07	IDLE
24057	RADIUS Server	12/23/2014 23:01:19 +0000	12/23/2014 23:01:19 +0000	17:40:07	IDLE
24053	RADIUS Server	12/23/2014 23:01:19 +0000	12/23/2014 23:01:19 +0000	17:40:07	IDLE
23866	XML-RPC Server	12/23/2014 23:01:04 +0000	12/23/2014 23:01:04 +0000	17:40:21	IDLE


Localhost table columns description is following:

Column	Description
ID	System service ID
Service	Name of system service
Started on	Service start date
Uptime	Service current uptime

By using button the service is started, with button it is restarted, and with button service is stopped.

Master Database Sessions table columns description is following:

Column	Description
ID	Database session ID
Application	Name of the application
Session Start	Session start date
Query Start	Query start date
Duration	Session duration
Query	Query description

You can kill any of current sessions by pressing  button.

Task Scheduler

On this page

- [Task Scheduler](#)
- [Cache Manager](#)

Task Scheduler

This section represents a task scheduler to manage system utilities (see screenshot below):

Screenshot: Task Scheduler section main window

Active	Manual Run	Name	Run at	In Queue From	Last Run	
		Backup Manager	20 minute(s), 3 hour(s), every 1 day(s)	—	15/02/2014 13:18:41 +0300	
		Balances Manager	20 minute(s), 3 hour(s), every 1 day(s)	—	15/02/2014 13:18:42 +0300	
		RADIUS Server	every 50 minute(s)	—	22/04/2014 11:10:51 +0300	
		SIP Redirect Server	every 50 minute(s)	—	22/04/2014 11:10:54 +0300	
		Cache Manager	every 6 minute(s)	—	22/04/2014 11:10:59 +0300	
		Calculator	every 10 minute(s)	—	22/04/2014 11:10:48 +0300	
		Calling Cards Manager	5 minute(s), every 1 hour(s)	—	18/03/2014 21:05:02 +0300	
		Cleaner	20 minute(s), 1 hour(s), every 1 day(s)	—	18/03/2014 02:20:02 +0300	
		Dynamic Routing Manager	every 30 minute(s)	—	21/03/2014 17:54:55 +0300	
		Email Rates Manager	1 minute(s), 5 hour(s), every 1 day(s)	—	19/03/2014 13:30:17 +0300	
		Events Manager	every 5 minute(s)	—	22/04/2014 11:11:01 +0300	
		Factors Watcher	every 5 minute(s)	—	21/03/2014 17:54:47 +0300	
		Files Collector	every 10 minute(s)	—	21/03/2014 17:54:54 +0300	
		Files Downloader	every 5 minute(s)	—	22/04/2014 11:10:57 +0300	
		Invoicing Manager	20 minute(s), every 1 hour(s)	—	18/03/2014 21:20:02 +0300	
		Log Rotator	10 minute(s), 1 hour(s), every 1 day(s)	—	18/03/2014 02:10:02 +0300	
		Mail Manager	every 5 minute(s)	—	22/04/2014 11:10:58 +0300	
		Notifier	30 minute(s), every 1 hour(s)	—	18/03/2014 20:30:02 +0300	
		Packages Manager	every 20 minute(s)	—	22/04/2014 11:10:52 +0300	
		Rates Notificator	every 15 minute(s)	—	22/04/2014 11:11:00 +0300	
		Report Generator	every 16 minute(s)	—	22/04/2014 11:10:53 +0300	
		Statistics Manager	every 20 minute(s)	—	21/03/2014 17:54:51 +0300	
		Statistics Watcher	10 minute(s), every 1 hour(s)	—	22/04/2014 11:10:49 +0300	
		XML-RPC Server	every 10 minute(s)	—	22/04/2014 11:10:46 +0300	

Utility	Description
Backup Manager	Utility that manages system backup processes
Balances Manager	Creates automatic charges
RADIUS Server	RADIUS server process
SIP Redirect Server	SIP Redirect server process
Cache Manager	Cache Manager process
Calculator	Utility that processes all data collected from CDR-files
Calling Card Manager	<i>Calling Cards</i> manager process
Cleaner	Utility that automatically cleans old messages from <i>Events Log</i> section
Dynamic Routing Manager	Utility that creates routing tables used in Dynamic Routing feature
Email Rates Manager	Utility that imports rate tables updates from emails
Events Manager	Process that sends events to e-mails according to <i>Events Config</i>
Factors Watcher	Utility that controls <i>Factors Watcher</i> tool
Files Collector	Utility that controls file collectors

Files Downloader	Utility that automatically downloads cdr-files from switch host
Invoicing Manager	Utility that manages the autoinvoicing feature
Log Rotator	Utility that controls log-files
Mail Manager	Sends e-mails from mail queue (invoices, notifications etc)
Notifier	Notifies in case of low balance or HDD space events
Packages Manager	Utility that manages your packages
Rates Notificator	Utility that notifies clients about rate changes
Report Generator	Utility that manages data generation for reports
Statistics Manager	Utility that manages statistics packages
Statistics Watcher	Utility that sends generated statistic reports by scheduled time
XML-RPC Server	XML-RPC server process

Cache Manager

Cache Manager is rather specific tool, because it continuously monitors and includes client-related changes for RADIUS and SIP Redirect (among other things). That tool is listed among others in Task Scheduler.

So, the tip regarding *Cache Manager* is following: if customer had no assigned packets, accounts, presets or translations, and you decided to add one, then RADIUS or SIP Redirect servers will notice those changes only after *Cache Manager* runs and does it's job. Please note, that this is only applicable if customer previously had absolutely no items listed above, in other words, if you add second account to customer, then that change will be effective instantly.

API Testbed

This section allows to send/receive JSON-RPC API calls via the web interface. It is important to understand that this section allows you to actually run API requests, it is not a simulation. So if you requested to delete or modify a client by running an API request, this client will be actually deleted from the system or modified.

Screenshot: API Testbed

The screenshot shows the API Testbed interface. It has a header 'API Testbed' with a home icon. Below are four sections: 'API SERVER' with a 'JSON-RPC URL' input field; 'API METHOD' with 'Module' (Management / Clients) and 'Action' (list) dropdown menus; 'AUTHENTICATION' with 'Login' (admin) and 'Password' input fields; and 'PARAMETERS' with a large text area containing an empty JSON object {}. A 'Send Request' button is located at the bottom right.

Field	Description
JSON-RPC URL	URL is set by default according to current server settings
Module	Select which module to call
Action	Set which action to call
Login	Specify a login that will be used during the call
Password	Specify a password that will be used during the call
Parameters	Enter JSON data that will be sent to the API

After the "Send Request" button is pressed you will see:

- **API Request** - full JSON message that has been sent;
- **API Response** - full JSON response from RPC server.

Both request and response are shown as JSON tree with ability to switch to RAW JSON (Screenshot).

Screenshot: API Request & API Response

The screenshot shows the API Testbed interface displaying the API Request and API Response. The API Request is shown in a JSON tree view with the following structure:

```
{
  jsonrpc: "2.0",
  method: "clients.didsList",
  - params: {
    - auth: {
      login: "admin",
      password: "123456"
    }
  },
  id: "api-testbed"
}
```

The API Response is also shown in a JSON tree view with the following structure:

```
{
  jsonrpc: "2.0",
  id: "api-testbed",
  - result: {
    code: false,
    session_id: "1-dkh1vhdb5p05f9euuuptekbe1",
    - messages: [
      + { ... }
    ],
    return: {},
    errors: {}
  }
}
```

Also, it's possible to **include specific charges by ID** in the invoices in the *API Testbed* section. The ID for extra charges and packages you can check in the *Transactions* section. Then you need to add the variable **"charges_list"** with respective values in the *"Parameters"* field of the *API Testbed* section (see screenshot below):

Screenshot: API Testbed settings

API Testbed

API SERVER
JSON-RPC URL:

API METHOD
Module:
Action:

AUTHENTICATION
Login:
Password:

PARAMETERS

```
{
  "charges_list": {
    "0": "437",
    "1": "428",
    "2": "390",
    "3": "370"
  },
  "descr": "",
  "make_type": "generate",
  "id_invoices_templates": "12",
  "attach": "",
  "total_stats": "0",
  "attach_cdr": ""
}
```



API method "**clients/authorizeAdd**" allows to add a pre-configured [Authorize.net](#) client's profile. It enables to transfer the client's credentials via API and there is no need to register the client via *Client's Panel*. It includes next parameters: *id_clients*, *id_customer_profile*, *id_payment_profile*.



Please note, if the user has access to delete gateways via *API Testbed*, he can **remove all gateways regardless of which reseller owns** respective gateway.

Users

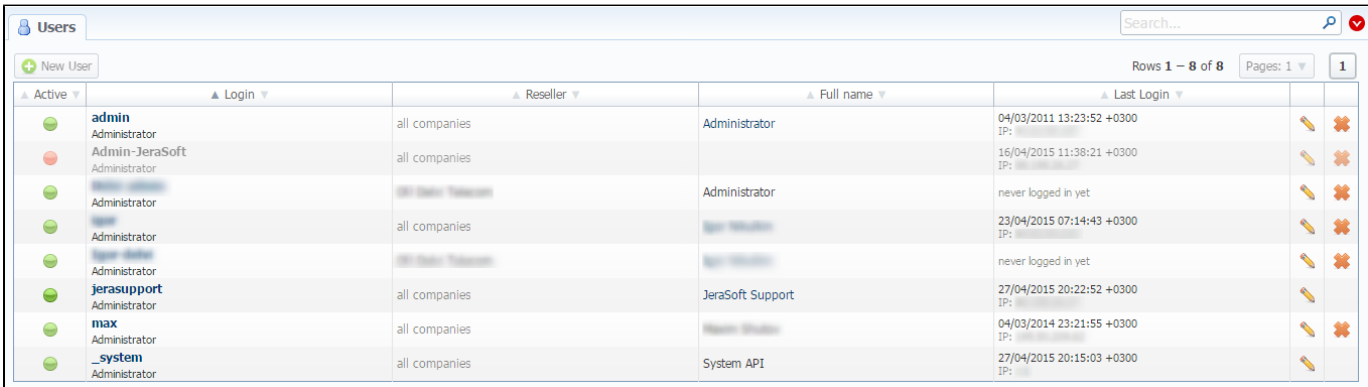
On this page

- [Users List](#)
- [Adding New User](#)

Users List

This section displays system's registered users (Screenshot):

Screenshot: Users list main window




Active	Login	Reseller	Full name	Last Login		
	admin Administrator	all companies	Administrator	04/03/2011 13:23:52 +0300 IP: [redacted]		
	Admin-JeraSoft Administrator	all companies		16/04/2015 11:38:21 +0300 IP: [redacted]		
	[redacted] Administrator	[redacted]	Administrator	never logged in yet		
	[redacted] Administrator	all companies	[redacted]	23/04/2015 07:14:43 +0300 IP: [redacted]		
	[redacted] Administrator	[redacted]	[redacted]	never logged in yet		
	jerasupport Administrator	all companies	JeraSoft Support	27/04/2015 20:22:52 +0300 IP: [redacted]		
	max Administrator	all companies	[redacted]	04/03/2014 23:21:55 +0300 IP: [redacted]		
	_system Administrator	all companies	System API	27/04/2015 20:15:03 +0300 IP: [redacted]		

Column	Description
Active	Users status
Login	Users accounts name
Reseller	Owners to whom users belong
Full name	Mailto links of users
Last Login	Data and time of the last users' login, and users IP

Adding New User

You can add new user by pressing "New User" button. Then, in pop-up window, you need to specify login, password, user's full name, e-mail, and configure his access rights (so called "roles") (Screenshot below). Also don't forget to specify a reseller that this user will represent. By doing so you will allow new user to see and manipulate only clients, rate tables and other specific data that belong to specified reseller and his agents (for example, if you create client under Reseller A, which already has Agent A under him, this user will only see clients that belong to Reseller A and Agent A etc). Press "OK" button to add new user.

Screenshot: Adding new user window

 **New User**

Login:

Password:

Role: Accounting ▼

Disabled

Full name:

E-mail:

Reseller: all resellers ▼

if empty — no access limits

Allowed IPs:

Field	Description
Login	Specify a user login.
Password	Define a password
Role	Select a role for a user from drop down list
"Disabled" Checkbox	Check if you need to temporary restrict access to the system for a user
Full name	Enter a user name. Please note that "Full name" is a mailto link displayed in "Users" section
E-mail	Specify a user e-mail
Reseller	Select a reseller for a user
Allowed IPs	Enter IPs or subnets, one record per line, i.e. user will have access to the system only if he/she logs in via specified IPs



Tip 1: Each user can have only one assigned role for.

Tip 2: We strongly recommend avoiding non-latin characters in login/passwords at the creating of users.

Roles

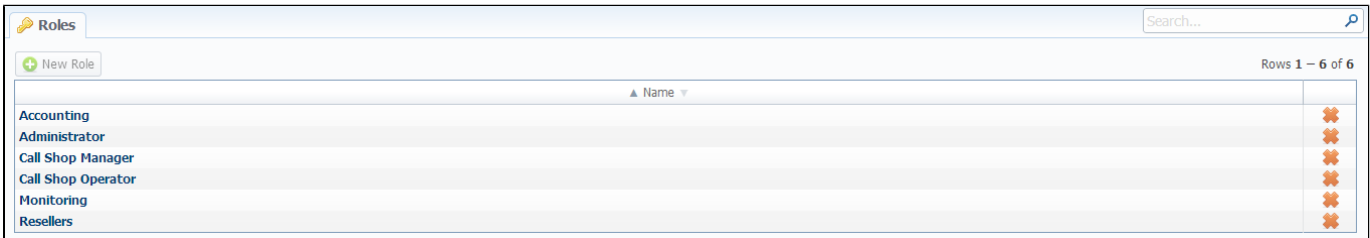
On this page

- [Roles List](#)
- [Adding New Role](#)
- [Knowledge Base Articles](#)

Roles List

This section allows to specify access rights for different sections of the system (see screenshot below):

Screenshot: Roles section main window



The screenshot shows a web application interface for managing roles. At the top, there is a search bar and a 'New Role' button. Below this is a table with a 'Name' column and a column of orange 'X' icons representing access rights. The table contains six rows of roles: Accounting, Administrator, Call Shop Manager, Call Shop Operator, Monitoring, and Resellers. The status 'Rows 1 - 6 of 6' is visible in the top right corner of the table area.

Name	
Accounting	X
Administrator	X
Call Shop Manager	X
Call Shop Operator	X
Monitoring	X
Resellers	X


Adding New Role

To add a new role, click the "New Role" button on the toolbar. A new window with role settings appears and you need to enter the name, choose the default module and select respective access rights for sections in *Access Permissions* table.



The "Default Module" field specifies a default section, that will be displayed when you login into system.

Screenshot: Adding new role window

 **Roles**

Name:


Default Module:

ENTRIES


Name	Access Permissions				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management / Clients	<input type="checkbox"/> Read	<input type="checkbox"/> Write			<input type="checkbox"/> Full Delete
Management / Accounts	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Management / Rate Tables	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Management / Invoices	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Management / Transactions	<input type="checkbox"/> Read	<input type="checkbox"/> Write	<input type="checkbox"/> Execute		
Management / Balance Report	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Management / Resellers	<input type="checkbox"/> Read	<input type="checkbox"/> Write			<input type="checkbox"/> Full Delete
Management / Client Packages	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Management / Presets	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Management / Traffic Processing	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Retail / Packages	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Retail / DID Management	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Retail / Calling Cards	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Retail / Top-up Cards	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Retail / Call Shops	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Statistics / Dashboard		<input type="checkbox"/> Write	<input type="checkbox"/> Execute		
Statistics / Summary Report	<input type="checkbox"/> Read		<input type="checkbox"/> Execute	<input type="checkbox"/> Billing data	
Statistics / Orig-Term Report	<input type="checkbox"/> Read		<input type="checkbox"/> Execute	<input type="checkbox"/> Billing data	
Statistics / Profit Report	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Statistics / LCR Lists	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Statistics / CDRs List	<input type="checkbox"/> Read	<input type="checkbox"/> Write	<input type="checkbox"/> Execute		
Statistics / Mismatches Report	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Statistics / Calls Rerating			<input type="checkbox"/> Execute		
Statistics / Reports Templates	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Statistics / Archive Management	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Tools / Rates Analysis	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Tools / Rates Generator			<input type="checkbox"/> Execute		
Tools / Active Calls			<input type="checkbox"/> Execute		
Tools / Factors Watcher	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Tools / CDR Disputes	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Routing / Routing Plans	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Routing / Routing Analysis	<input type="checkbox"/> Read		<input type="checkbox"/> Execute		
Routing / DR Policies	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Code Decks	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Currencies	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Payment Accounts	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Payment Terms	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Payment Gateways	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Time Profiles	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Taxes Profiles	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Groups	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Invoices Templates	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / VoIP Gateways	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
Configuration / Settings	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / Events Log	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / Audit Log	<input type="checkbox"/> Read				

System / Mail Queue	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / System Status	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / Task Scheduler	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / API Testbed			<input type="checkbox"/> Execute		
System / Users	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / Roles	<input type="checkbox"/> Read	<input type="checkbox"/> Write			
System / Charts Templates		<input type="checkbox"/> Write			
System / Change Password			<input type="checkbox"/> Execute		
System / About System	<input type="checkbox"/> Read				
System / Get Support			<input type="checkbox"/> Execute		

Checkbox	Description
Read	Allows / forbids read permission
Write	Allows / forbids edit permission
Execute	Allows / forbids system services execution
Full Delete	Allows / forbids full delete permission
Billing data	Allows / forbids billing data permission

 **Tip:** System has 5 pre-installed roles:

- **Administrator** – has all access permissions;
- **Monitoring** – has access permissions with ability to monitor them. Also doesn't have access to technical settings and some statistic info that is only available to Administrator;
- **Resellers** – has access permissions to productively work with its clients. Also doesn't have access to technical settings and some statistic info that is only available to Administrator (use this role when adding Reseller or Agent user).
- **Call Shop Manager** – has access permissions to work with call shops, clients, packages and rate tables.
- **Call Shop Operator** – has access permissions to work with call shops and summary/CDRs reports, see rate tables.

 Please note, that the **Parent Reseller** has access to all information of his **Sub-Resellers**, can assign **any routing plan and rate table** to them.

 The user with disabled *Management/Clients* module in the **Roles section** will not see the Clients List from the *Clients Panel*.

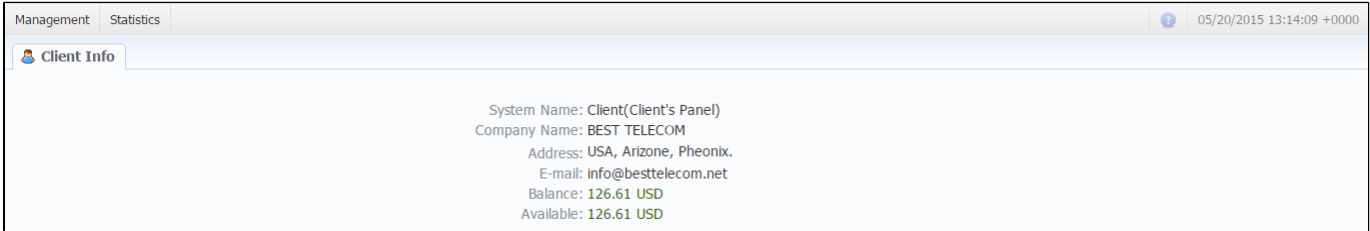
Knowledge Base Articles

- [How to hide rates in Summary Report for specific system users?](#)

Client's Control Panel

This section represents a control panel that can be used by client to check his balance and statistics.

Screenshot: Clients' control panel



Customer logs into his control panel by typing http://vcs_ip_address/clients in his internet browser and providing his credentials. This login and password are created in *Clients* section by editing customer's properties. Please note, that the "**Balance**" field represents the **Live Balance**, that is calculated on basis of performed payments and processed calls.

Customer's Portal consists of 2 sections:

Section	Description
Management	Allows viewing of client and balance information (<i>Client Info</i> subsection), call rates for current client (<i>Rates</i> subsection), topping up one's balance (<i>Refill Balance</i> subsection) and viewing accounting (<i>Balance Report</i>) report
Statistics	Allows viewing of client's own statistics – summary (<i>Summary Report</i>) and detailed (<i>CDRs List</i>) reports

Password change procedure is same as for administrative interface user.

You can log out from customer's portal by using *Logout* menu.



1. The Client can see packages that are currently assigned to him (active, pre-activated) or used (archived) previously. All other packages of the Reseller will be invisible for this Client.
2. When you delete the client (i.e. its status is "*Deleted*" in the *Client's settings*), its login/password for access to the Client's Panel will be reset and you can use it for another client

System Shell Tools

On this page

- [Requirements Checker](#)
- [Services Manager](#)
- [Cluster Manager](#)
 - [Init Master](#)
 - [Master: Add new Slave](#)
 - [Slave: Promote to Master](#)
 - [Slave: Sync Files](#)
 - [Cluster Status](#)

This section describes **shell tools** required for management of the system at the very system level. All these tools are shipped with the VCS distributive. You need to use SSH or direct access to the server in order to run any of these tools. Please notice that most of given tools require "root" access and show inline help when run without arguments.



Important!

Please use these tools **only if you have a clear understanding** of what you are doing. Misuse of the tools may cause [an improper functioning](#) of the system.

Requirements Checker

The tool is aimed to check **minimal requirements** and **security recommendations** at your server before and after installation.

Usage

```
/usr/local/vcs/bin/setup-checker
```

The tool should be run under "root" permissions without any arguments. When the tool is run it will perform a list of checks and show results for each of them. Use it:

1. Before installation of the VCS to check **minimal hardware and software requirements**. At this stage you may [download the tool](#) separately from the VCS.
2. After installation of the VCS to check **security recommendations**. Usually you need to tune your firewall settings according to the [JeraSoft Billing First Steps](#).



Please Note!

The tool checks only minimal requirements. **Real hardware requirements** highly depend on your traffic and deployment model.

Services Manager

The tool is used for **managing the VCS Services**. It allows to correctly start, stop, get status of the VCS Services as RADIUS Server, SIP Server, Calculator, etc.

Usage

```
/usr/local/vcs/bin/service <service-name> <action> [<options>]
```

The tool should be run under "root" or "vcs" user. Service manager takes 2 arguments:

Argument	Description
<service-name>	Short name of the service. Run the tool without arguments to get list of the services at your system.

<code><action></code>	Action to perform, one of the following: <ul style="list-style-type: none"> • <i>start</i> - start the service • <i>stop</i> - stop the service • <i>restart</i> - stop and then start the service • <i>reload</i> - force config re-read without restart • <i>status</i> - return current status of the tool
-----------------------------	--

Additionally you may pass next options:

Option	Description
<code>--path=<path></code>	Specify the VCS location. Only if different from <code>/usr/local/vcs</code> .
<code>--user=<user></code>	Specify user the VCS runs under. Only if different from "vcs".

For your convenience there are some examples below:

```
Restart RADIUS Server


/usr/local/vcs/bin/service bbradiusd restart
```

```
Start Files Downloader

/usr/local/vcs/bin/service files_downloader start
```

```
Get status of SIP Server

/usr/local/vcs/bin/service bbsipd status
```

 The tool also complies with [LSB Init Scripts](#) standard. It allows to analyse exit code of each action in case of automated usage.

Cluster Manager

The tool is used to **manage cluster**. It allows to init the cluster, add and promote slave to master, etc.

```
Usage

/usr/local/vcs/bin/cluster <command> [<options>]
```

The tool requires "root" permissions. Cluster Manager takes command as mandatory argument and additional options. Some of commands may be run only on Master and others only on Slave. There are two available types of Slave: redundancy and reporting. All extra options for the commands are explained below in the corresponding subsection.

Init Master

The command is **run on Master** and used for Master to configure its parameters.

```
Bash

/usr/local/vcs/bin/cluster init-master --ip=<IP-of-master> [<extra-options>]
```

This command may require additional options:

Option	Description	Default
--ip=<ip>	IP Address of the Master server	none
--ssh-port=<port>	SSH Port at the master server	22
--data=<path>	PostgreSQL data path on master system	autodetect
--vcs-path=<path>	Path to the VCS on Slave	/usr/local/vcs

Master: Add new Slave

The command is **run on the Master** and used for:

- **first time initialisation** of the cluster;
- **addition of the new slave** node to the cluster;
- addition of the **old master to work as slave** after failover.

Bash

```
/usr/local/vcs/bin/cluster init-slave --ip=<IP-of-slave> [<extra-options>]
```

This command encapsulates 4 sub-commands:

- configuration of the *Master* to ship replication logs (`init-master`)
- configuration of the *Master* to accept connections from the *Slave* (`init-master-access`)
- configuration of the *Slave* to receive replication logs (`init-slave`)
- show status of the cluster (`status`).

Each of this commands may be performed separately if you know exactly what you need.

This command may require additional options:

Option	Description	Default
--ip=<ip>	IP Address of the Slave server	none
--ssh-port=<port>	SSH Port at the slave server	22
--username=<login>	Login to the slave server	jerasupport
--data=<path>	PostgreSQL data path on slave system	same as master
--vcs-path=<path>	Path to the VCS on Slave	/usr/local/vcs
--role=<role>	Role of the secondary system. Could be [redundancy or reporting]	redundancy

Slave: Promote to Master

The command is **run on the Slave** and used to promote current *Slave* to *Master*.

Bash

```
/usr/local/vcs/bin/cluster promote
```

The command is used for failover. After you fix old *Master* you may add it as new *Slave* using "`init`" command.



In case when you have more than 2 nodes in cluster, you need to re-init all other slaves from this new *Master*.

Slave: Sync Files

The command is **run on the Slave** and used to synchronise files from the *Master*. The command is mostly used in crontab for auto-sync.

Bash

```
/usr/local/vcs/bin/cluster sync-files
```

During initialisation of the cluster tool adds this command to the crontab (*/etc/cron.d/vcs-cluster*) at the *Slave* node.

Cluster Status

The command may be run **on any node** and used to get status of the cluster.

Bash

```
/usr/local/vcs/bin/cluster status
```

When command is run on the *Master* it shows type of the node and attached Slaves, that are up to date:

```
[ NOTICE ] Cluster Status
ifconfig | grep 'inet addr:' | grep -v '127.0.0.1' | cut -d: -f2 | awk '{ print $1}'

Master (master ip): ACTIVE
Redundancy (slave ip): ACTIVE
```

When command is run on the *Slave* it shows type of the node and synchronisation delay.

```
[ NOTICE ] Cluster Status
ifconfig | grep 'inet addr:' | grep -v '127.0.0.1' | cut -d: -f2 | awk '{ print $1}'

Master (master ip): NOT AVAILABLE | Activity delay: -00:00:58.393423
Redundancy (slave ip): ACTIVE
```

Please don't worry if you see the following:

```
the row: Master (master ip): NOT AVAILABLE
```

It's a normal behaviour. Instead, please pay attention to "*Activity delay*" parameter it shows large values if replication is broken and servers are not in sync.

In case when the *Slave* is not in synchronisation (NOT-in-sync) with the *Master* you need to re-initialise.

API Reference

On this page

- [Access the API](#)
- [Authentication](#)
- [API Request](#)
- [API Response](#)
- [Work with files](#)
- [Examples: Pure XML-RPC](#)
- [Examples: Pure JSON-RPC](#)
- [Examples: PHP Library](#)
- [Examples: Python Library](#)
- [Methods Reference](#)

The **JeraSoft VCS API** allows you to easily integrate 3rd party applications with JeraSoft's VCS platform or develop your own tools on top of it. You can use API to retrieve, add or modify data. Every object that you could use in the web interface can be accessed within API, be it client, rate or statistics report.

The JeraSoft VCS API may be accessed using either [XML-RPC](#) or [JSON-RPC](#). Both are fairly standard protocols for remote procedure calls. **Most programming languages** have libraries to work with any of these protocols. The API uses the same logic as the web interface and works very similar, which makes its usage easier.

Access the API

To access **XML-RPC** interface use:

```
https://<your-system-IP>/xmlrpc/
```

To access **JSON-RPC** interface use:

```
https://<your-system-IP>/jsonrpc/
```

Before accessing the system make sure that your **IP is allowed** on the firewall. Also please make sure that rest of the world is blocked by firewall. You can get more details about it in the [JeraSoft Billing First Steps](#).

Authentication

In order to make any request to the API you need to **authenticate** using login and password. We strongly recommend having **separate API account** for each application you make calls from. Besides this, we recommend having dedicated Role for API users, which allows only needed actions. Authentication is done by sending the following array along with other arguments:

```
{
  "auth": {
    "login": "admin",
    "password": "password"
  }
}
```

In order to increase performance you may not authenticate for each call but do it once and **save Session ID** given back to you in response. This Session ID may be sent in further requests instead of login and passwords to continue using same session without re-authentication. Session ID should be sent with other arguments in the following format:

```
{
  "SID": "1-dsglnqr4qnsdihr8dj6da7qr4"
}
```

It should be mentioned that authentication should be made **within** first call to the API.

API Request

Each request besides authentication information should include:

Name	Description	Example
Method Name	Name of the module and action to call	clients.editForm
Arguments	List of arguments for the method call	id_clients = 11 auth[login] = admin auth[password] = password

API Response

Each response will include the following information:

Name	Description	Example
code	Return code, usually true on success or false on failure	1
return	Array with data returned by method	[client] => Array ([id] => 11 [id_companies] => 3 [type] => 0 [name] => Customer A [groups] => Customers [c_dt] => 2013-03-30 16:26:15+03 [status] => active [credit] => 100 ...)
session_id	Session ID which may be used to speed up next calls	1-dsglnqr4qnsdih8djj6da7qr4
messages	List of success / warning messages returned by message	array()
errors	List of abnormal errors if they fired during processing	array()

Work with files

There is a specific case when your request to billing should provide file response. Some examples of this would be an invoice file download, CDRs List download, etc. Using plain XML-RPC or JSON-RPC with base64 on top of it is not effective here as the file may contain hundreds of megabytes. This special case is handled with common **HTTP Request** to:

```
https://<your-system-IP>/admin/
```

The request may be either GET or POST and should include either Login and Password or Session ID. In response the server will send the file according to HTTP protocol.

Examples: Pure XML-RPC

XML-RPC Request

```
<?xml version="1.0" encoding="iso-8859-1"?>  
<methodCall>  
<methodName>clients.editForm</methodName>  
<params>  
<param>
```

```

<value>
  <struct>
    <member>
      <name>id_clients</name>
      <value>
        <int>11</int>
      </value>
    </member>
    <member>
      <name>auth</name>
      <value>
        <struct>
          <member>
            <name>login</name>
            <value>
              <string>admin</string>
            </value>
          </member>
          <member>
            <name>password</name>
            <value>
              <string>password</string>
            </value>
          </member>
        </struct>
      </value>
    </member>
  </struct>
</value>
</param>
</params>
</methodCall>

```

XML-RPC Response

```

<?xml version="1.0" encoding="utf-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <struct>
          <member>
            <name>code</name>
            <value>
              <boolean>1</boolean>
            </value>
          </member>
          <member>
            <name>session_id</name>
            <value>
              <string>1-dsglnqr4qnsdihr8djj6da7qr4</string>
            </value>
          </member>
          <member>
            <name>messages</name>
            <value>
              <array>
                <data/>
              </array>
            </value>
          </member>
          <member>
            <name>return</name>
            <value>
              <struct>
                <member>
                  <name>client</name>
                  <value>
                    <struct>

```

```

    <member>
      <name>id</name>
      <value>
        <int>11</int>
      </value>
    </member>
    <member>
      <name>name</name>
      <value>
        <string>Customer A</string>
      </value>
    </member>
    <member>
      <name>groups</name>
      <value>
        <string>Customers</string>
      </value>
    </member>
    <member>
      <name>c_dt</name>
      <value>
        <string>2013-03-30 16:26:15+03</string>
      </value>
    </member>
    <member>
      <name>status</name>
      <value>
        <string>active</string>
      </value>
    </member>
    <member>
      <name>credit</name>
      <value>
        <double>100</double>
      </value>
    </member>
  </struct>
</value>
</member>
</struct>
</value>
</member>
</struct>
</value>
</param>
</params>
</methodResponse>

```

Examples: Pure JSON-RPC

JSON-RPC Request

```

{
  "method": "clients.editForm",
  "params": {
    "id_clients": 11,
    "SID": "1-bmdgeu6bn22jlmkuffg391t513"
  },
  "id": 1
}

```

JSON-RPC Response

```

{
  "jsonrpc": "2.0",

```

```

"id": 1,
"result": {
  "code": true,
  "session_id": "1-bmdgeu6bn22jlmkuffg391t513",
  "messages": [],
  "return": {
    "client": {
      "id": 11,
      "name": "Customer A",
      "groups": "Customers",
      "c_dt": "2013-03-30 16:26:15+03",
      "status": "active",
      "credit": 100,
      "c_company": "Mancy",
      "c_address": null,
      "c_email": "admin@example.net",
      "c_email_tech": "admin@example.net",
      "c_email_billing": "admin@example.net",
      "c_email_rates": "admin@example.net",
      "id_currencies": 27
    },
  },
  "errors": []
}
}

```

Examples: PHP Library

For you convenience it is always better to have higher level class on top of the simple RPC protocol. You can [download](#) example of such class for PHP. Below is example:

PHP Example

```

include 'class.VcsApi.php';

// create an API object
$api = new VcsApi('vcs.demo.jerasoft.net', 'demo', 'demo', 80);

// make a call to the API
$data = $api->clients->editForm(array('id_clients' => 8));

/*
VcsApiResponse Object
(
    [code] => 1
    [messages] => Array
        (
        )
    [data] => Array
        (
            [client] => Array
                (
                    [id] => 8
                    [id_companies] => 3
                    [type] => 0
                    [cc_serial] =>
                    [name] => Customer 01
                    [groups] => Vendors, IntraLATA-IntraState, IntraLATA-InterState, InterLATA-IntraState,
InterLATA-InterState, Customers
                    [c_dt] => 2012-03-20 09:29:49+00
                    [status] => active
                    [credit] => 1000
                    ...
                )
            )
        )
)

```

```
)
)
*/
```

Examples: Python Library

To download a sample library for Python please visit [/usr/local/vcs/lib/pycore/vcsapi.py](#). It will simplify work with with API. Below is the example of using this library:

Python Example

```
import vcsapi

# create an API object
api = vcsapi.Api('vcs.demo.jerasoft.net', 'demo', 'demo', 80)

# make a call to the API
response = api.clients.editForm({'id_clients': 8})

print response.code      # True
print response.messages # [ ]
print response.data      # {'client': {'id': 8, 'type': 0, 'name': 'Customer 01', ...}}
```

Methods Reference

At the moment we are working hard to bring you full and detailed list of methods, arguments and expected output. However as API fully duplicates web methods, it is easy to find their names and arguments yourselves. Lets check a quick example, like creating a reseller.

In the web interface the link to this action is "<https://<your-billing-IP>/admin/companies/add>", with "*companies*" being a module and "*add*" being a method. The resulting method to call via API is "*companies.add*".

In order to find out arguments for this method you may look for HTTP request in your browser (using FireBug in Firefox, Developer Tools in Chrome). Another way is to check for dump in `/usr/local/vcs/var/log/runtime.log` which looks like:

```
[20-Jan-2012 17:32:06+0200] [webAdmin/#260808] REQUEST: /companies/add
Array
(
    [type] => 10
    [name] => TESTCOMPANY
    [id_companies] =>
    [prepaid] => 1
    [credit] => 0.00
    ...
)
```

This log entry includes full list of the arguments used. However many of them are optional. Try calling method with the arguments you need - system will let you know if you are missing any of the arguments.

Rates Tab(3.10.7.)

On this page

- [Tab Description](#)
- [Adding New Rate](#)
- [Mass Rate Edit](#)
- [Quick Rate Search](#)
- [Not confirmed rates](#)


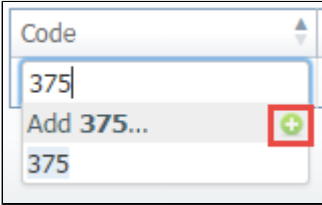

Tab Description

This tab allows the user to add new rates with different tariffication parameters for each code, also export rates and mass update them. You know you are on the **"Rates"** tab when the tab is highlighted.

Screenshot: Rates tab settings

Adding New Rate

All you need to do is to click the **"Add Rate"** button to create a new rate line and then fill next fields:

Field	Description
Code	<p>Destination code. Please note, you can add a code at already chosen code deck while creating a new rate. To do it, click the plus icon  next to the respective code (see screenshot below). The plus icon will be visible if there is code deck specified previously.</p> <p><i>Screenshot: Rates settings/ column Code</i></p> 
Code Name	Name of code group (available if code deck is attached)
Rate	Price per 1 minute of call
Changes	This field shows how current rate differs from previously effective one
Effective Date	Rate start date (newest available rate for particular destination)
Min	Minimal time of call that will be tarifficated. For example, if total call time was 20 seconds and <i>Min Time</i> is 30, then client will pay for 30 seconds of call
Int	Tariffication interval. This parameter is used, when <i>Min Time</i> time expires
Extra	Additional parameters are stored under  down arrow.

Fields		
• Rate Group		Specify group for jurisdictional billing. If you don't have the jurisdictional billing, please leave the default settings.
• End Date		After specified date the rate would not be used
• Profile		Which time profile will be used for current rate, for example, <i>business time</i> , <i>non-business time</i> , <i>weekends</i> , etc.
• Setup Fee		Setup fee (charged when call duration is longer than 0 seconds)
• Grace Time		Time interval that will not be tarifficated (free time). For instance, if you specified 5 sec as a <i>Grace time</i> , that means, all calls with duration up to 5 seconds (including calls with session time of 5 seconds) will be free of charge
• Notes		Additional information about current rate

After you finish filling all fields, click the "" button.

Also, you can quick export the rates by clicking the **"Export Filtered"** button on the rates toolbar or open the tab **"Export"**.

✓ How to manage future changes of rates manually

To do so, enable the simple mode of Full A-Z import and import rates. Then, click the **"Future changes"** button on the toolbar of Rates tab. It will show a list of conflicting rates. On the screenshot below you can find two pairs of conflicting rates because of different effective dates.

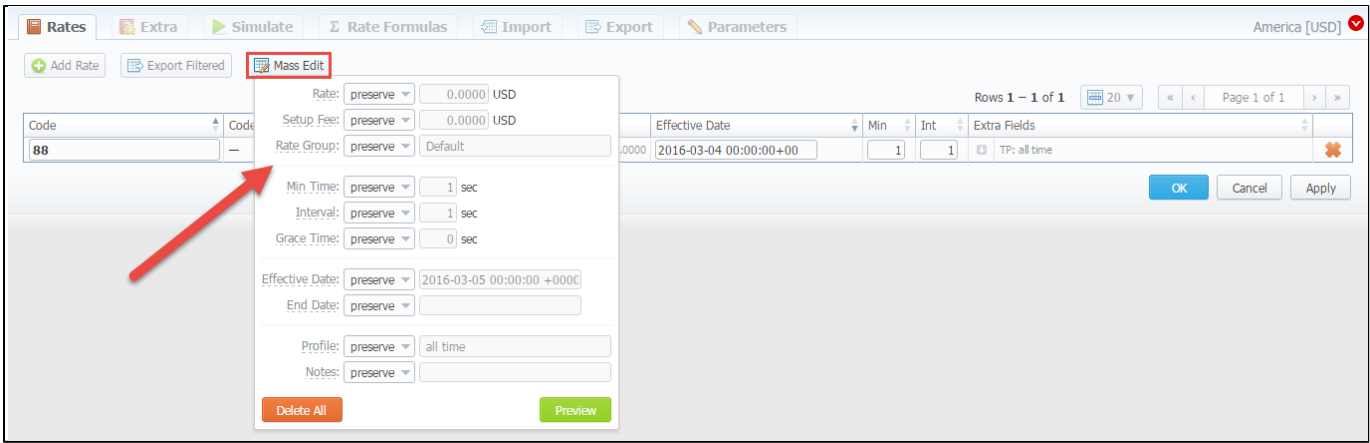
Screenshot: Rates tab

Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
33	1	0.1900	0.0000	2016-07-16 20:00:00-04	1	1	TP: all time
33	1	0.1900	-0.0100	2016-07-13 00:00:00-04	1	1	TP: all time
88881111	2	0.3900	0.0000	2016-07-16 20:00:00-04	1	1	TP: all time
88881111	2	0.3900	0.0000	2016-07-13 00:00:00-04	1	1	TP: all time

Mass Rate Edit


Moreover, it's possible to make a mass update of the rates by clicking the **"Mass Edit"** button on the rates toolbar and the drop-down settings menu appears. Then you need to fill the fields according to your needs.

Screenshot: Rates tab search settings



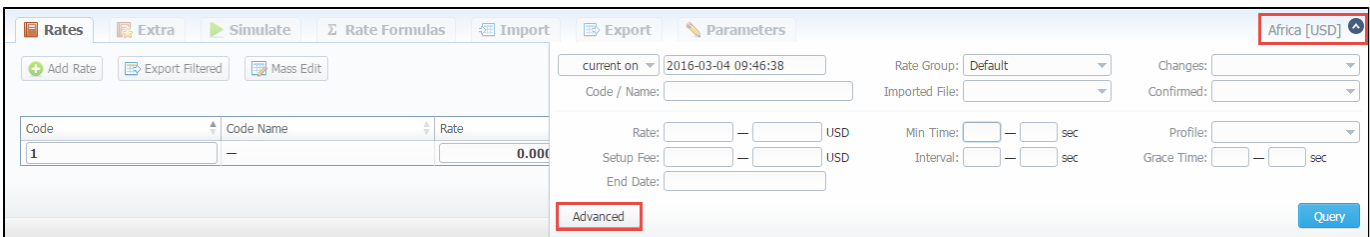
Mass edit options	Description
Optional parameters	<ul style="list-style-type: none"> • preserve - the default configuration that saves the rate not edited. Leave this parameter unchanged if required; • set to - it allows to edit rates, for example, specify the same effective date for all rates at once, regardless of previous configurations; • inc for - here you can indicate how the original value should be increased; • dec for - here you can indicate how the original value should be decreased.
Rate	Price per one minute of call
Setup Fee	An initial fee that is charged when call duration is longer than 0 seconds
Rate Group	Group for the traffic matching this rule. It's only for jurisdictional billing.
Min Time	Minimal time of the call
Interval	Interval for the tariffication in seconds. It's used when the Min time parameter expires
Grace Time	Not paid time interval in seconds
Effective Date	Start date before which the rate will not be used
End Date	Final date after which the rate will expire
Profile	Time Profile that will be applied to a current rate
Notes	Additional information about rate

Quick Rate Search

Use the **Quick Search** toolbar and click the down arrow  on the top of the page for fast investigation. When you click the red down arrow a new drop-down search menu appears (see screenshot below). To open additional settings, click the "**Advanced**" button.

To hide the drop-down search menu, click the upward pointing arrow  next to the title of the rate.

Screenshot: Rates tab search settings



Field	Description
-------	-------------

Rate Time Frame	Search by the period of a rate during which the rate is active, expired, etc., as compared with data specified in the next field. The following time frames are available to choose from drop-down list: <ul style="list-style-type: none"> • current on - search includes rates that are active for specified data • old for - search rates that are expired for specified data • future for - the future rates compared with specified data • current/new - includes current and future rates • all - includes all rates
Code /Name	Search by the title or code
Rate Group	Investigate by a respective name of the rate group that is used for jurisdictional billing
Imported File	Research by the title of an imported file , choose a file from the drop-down list of all available. If the list is empty, there is no imported files.
Changes	Search by the cost changes of the rate . The following types are available to choose from drop-down list: <ul style="list-style-type: none"> • Decreased • Increased • Not changed • New
Confirmed	Investigate by the state of the rate: confirmed or not confirmed
Rate	Research by the rate , the price interval could be specified
Setup Fee	Quick search by the setup fee of the rate , the interval could be specified
End Date	Search by the expiration date of the rate
Min Time	Research by the minimal time of call that will be tarifficate
Interval	Investigate by the tariffication interval
Profile	Fast search by the time profile of the rate
Grace time	Investigation by the interval of the free time



When you filter rates by the state (for example, *current/new, future for, current on*), **non-confirmed rates** will not show up in the search results. To include non-confirmed rates, choose the state **"All"** from the drop-down list.

Not confirmed rates

If you see the rate rows colored in yellow, this means that these rates in **pending state** and you need to confirm them all (click the **"Confirm All"** button) or each one separately (tap respective check boxes with codes and then click the **"Confirm"** button on the toolbar) (see screenshot below).

Not confirmed rates appear while import process. When you import a file with rates in the system and tap the **"Enable the confirm mode"** check box.

Screenshot: Rates tab search settings

Add Rate Export Filtered Mass Edit

Rows 1 – 10 of 10 10 Page 1 of 1

Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
<input type="checkbox"/> 10	—	0.0499	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 100	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 20	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 30	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 40	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 50	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 60	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 70	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 80	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time
<input type="checkbox"/> 90	—	0.0500	0.0000	2016-03-04 00:00:00+00	1	1	TP: all time

Confirm All OK Cancel Apply

Summary Report (x)

On this page

- [Summary Report Query Form](#)
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- [Simple scheme: how to generate a summary report](#)
- [To create query template](#)
- [Summary Report toolbar: export, chart.](#)
- [Side-by-side report](#)
- [Knowledge Base Articles](#)

Summary Report Query Form






This section allows you to generate a summary statistical report. Here you can create a report based on an existing template or generate a new one. Also, you can get the information sorted by date, clients and calls, even by the VoIP group.

Screenshot: Summary Report query form

To create new report

In order to create a statistic report go to the **Management** and open the **Summary Report** section.

Then you need to fill out the form with next parameters:

Section	Field Description
Filters	Filters that will be used for generating respective reports. Click plus sign  next to the "Filters" to select convenient filters for the report. Also, you can cancel any filter by clicking the sign  to delete.
	Period 1 Specify the first interval for the report. Please note, that the "Period" field is mandatory.
	Period 2 Accessible when you enable the "Compare Period" option by clicking the plus sign  next to the "Period". Specify the second interval for the report.
	Group By Select a grouping option, here you can choose and swap columns, change its order. There are following accessible options to group the data in reports: <ul style="list-style-type: none"> • Time: Year, Month, Date, Time. • Clients: Client Type/ Client/ Account/ Cards Serial/ Owner/ Package Name. • Calls: Code/Code Name/Currency/Rate/Extra Rate/Call Origin/ Disconnect Code/ VoIP Gateway. • Extras: VoIP Group. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  Please note, the "Group By" field is mandatory, it couldn't be empty in order to generate the report. It's intended to simply grouping option, the system groups data in specified columns. </div> <div style="border: 1px solid #f00; padding: 5px; margin-top: 10px;">  Please note, that if there is the Client or CC serial specified, it is not possible to group by default anymore. </div>
Additional Filters	


There are following accessible additional filters:


- **By clients:** Client Type, Client, Account, Client Group, Cards Serial, Package.
- **By calls:** Code, Code Name, Cost Total, Call Origin, Disconnect Code, VoIP Gateway.
- **Extras:** Owner/Time Total/ Calls Total/ Calls Not Zero/ ASR Current/ ACD Current.


Screenshot: Summary Report form/ Filters

FILTERS +		
Clients	Calls	Extras
Client Type	Code	Owner
Client	Code Name	Time Total
Account	Cost Total	Calls Total
Client Group	Call Origin	Calls Not Zero
Cards Serial	Disconnect Code	ASR Current
Package	VoIP Gateway	ACD Current

Client Type	Select a client's type for report (<i>Client, Reseller, Calling card or Call shop</i>)
Client	Define a client for the report
Account	Enter an account for the report
Client group	Define a client's group
Cards Serial	Indicate cards serial for the report
Package	Enter a package for the report
Code	Specify a code of needed destination
Code Name	Specify a code name of a desired destination
Cost Total	Enter the range of total call cost
Call Origin	Indicate call origination/termination
Disconnect Code	Define a disconnect code as a filtering parameter
VoIP Gateway	Specify a VoIP host as filtering criteria
Owner	Indicate the owner
Time Total	Enter the range of total calls duration in minutes
Calls Total	Enter the range of total calls
Calls Not Zero	Define the range of calls, that have duration equal to or more than 1 second
ASR Current	Specify the range of "ASR Cur" for calls you would like to display
ACD Current	Specify the range of "ACD Cur" for calls you would like to display
Output	This form contains settings of the output data of the report.

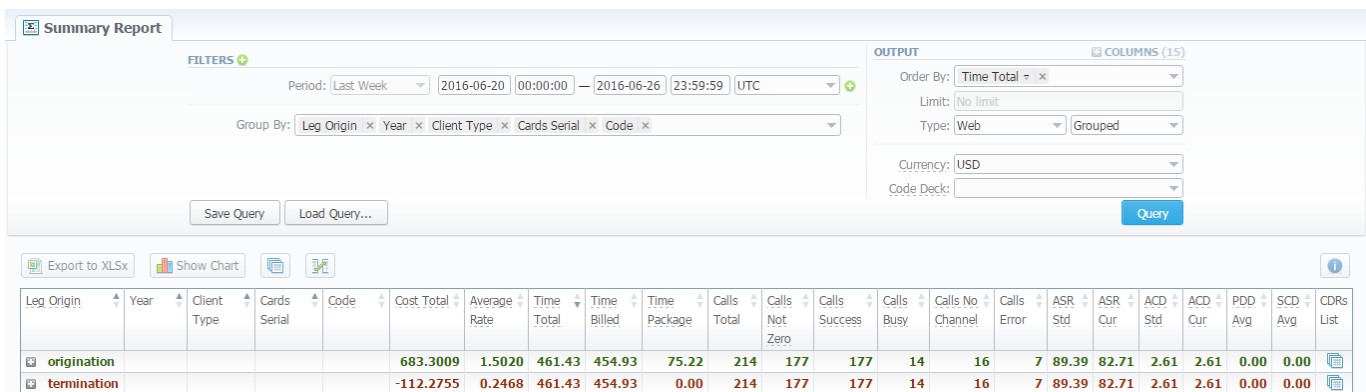
Click plus sign  near the "**Columns**" and select columns to output a report data. Also, you can cancel any chosen item.

Accessible columns in the report	
<p>There are following columns to add at the report:</p> <p>Columns for main period:</p> <p><i>Average Rate, Cost Total, Calls Not Zero, Calls Success, Calls Busy, Calls No Channel, Calls Error, ASR Std, ASR Cur, ACD Std, ACD Cur, SCD Avg, CDRs List, Time Total, Time Billed, Time Package, PDD Avg, SCD Avg.</i></p> <p>Columns for comparative period:</p> <p><i>Cost Total, Time Total, Time Billed, Time Package, Cost Total, Calls Not Zero, Calls Success, Calls Busy, Calls No Channel, Calls Error, Average Rate, CDRs list, ASR Std, ASR Cur, ACD Std, ACD Cur, PDD Avg, SCD Avg.</i> And it's possible to choose each parameter expressed as percentage.</p>	
Rate	<p><i>The call rate</i></p> <p>Avg. Rate - an average call rate that is used</p>
Cost	<p><i>The cost of the call</i></p> <p>Cost Total - Full price of calls</p>
Time	<p><i>The time of the call</i></p> <ul style="list-style-type: none"> • Time Total- the whole time of the calls in minutes • Time Billed- the whole billed time • Time Package- the time within respective package
Calls	<p><i>Quantity of calls in database</i></p> <ul style="list-style-type: none"> • Calls Total- Entire quantity of calls • Calls Not Zero - Quantity of calls, that have a duration equal to or more than 1 second • Calls Success - Quantity of calls, that have a duration equal to or more than 1 second and successful end code, calls with Q.931, disconnect cause 16 or 31 • Calls Busy - "Busy" calls quantity • Calls No Channel - No circuit / channel available • Calls Error - Quantity of declined calls
Statistics	<p>ASR - <i>Average successful rate (successful calls percentage)</i></p> <ul style="list-style-type: none"> • Std - Number of calls with status "success" divided by the total number of calls minus all calls with "no channel available" status • Cur - Number of calls with duration > 0 divided by total number of calls <p>ACD, min - <i>Average call duration</i></p> <ul style="list-style-type: none"> • Std - Sum of all call duration divided by number of calls with status "success" • Cur - Sum of all call duration divided by number of calls with duration > 0 <p>PDD Avg - <i>Average post dial delay</i></p> <p>SCD Avg - <i>Average session connect delay</i></p>
Extras	CDR's List - <i>list of detailed calls statistics</i>
Other output settings	
Order By	Select parameters to sort already grouped data in columns. Here you can sort data from highest to lowest values (or vice versa) and select different values.
Type	<p>Choose a format of the report from a drop-down list: <i>Web/CSV/Excel XLS/Excel XLSx.</i></p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p> Please note, that <i>Grouped</i> type of table view is available only for <i>Excel XLSx</i> and <i>Web formats</i>, it doesn't work with <i>CSV</i>.</p> </div> <p>Also, select next to the "<i>Type</i>" field a look of table view:</p> <ul style="list-style-type: none"> • <i>Plain</i> - a simple table view • <i>Grouped</i> - a table view with grouped data and possibility to collapse it

Limit	Determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen parameter. It is available only for plain type of the report.
Send to	You can send generated reports via e-mail. For example, it is useful when it takes a lot of time to run the report. Also, it is possible to specify several e-mails. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> This feature is available only for CSV/Excel XLS/Excel XLSx formats of the report, it doesn't work with Web.</div>
Currency	Specify a currency for the report. And all values will be automatically converted in the report to the specified currency.
Code Deck	Select a code deck from a drop-down list. All codes in the following report will be presented according to the specified code deck.




After selecting all needed parameters, click **"Query"** button and the system will generate a report:


Screenshot: Summary Report window




The screenshot shows the 'Summary Report' interface. On the left, there are 'FILTERS' for 'Period' (Last Week, 2016-06-20 00:00:00 to 2016-06-26 23:59:59 UTC) and 'Group By' (Leg Origin, Year, Client Type, Cards Serial, Code). On the right, 'OUTPUT' settings include 'Order By' (Time Total), 'Limit' (No limit), 'Type' (Web), 'Grouped', 'Currency' (USD), and 'Code Deck'. A 'Query' button is at the bottom right. Below the filters are buttons for 'Export to XLSx', 'Show Chart', and a help icon. The main area displays a table with columns for various metrics and two rows of data: 'origination' and 'termination'.

Leg Origin	Year	Client Type	Cards Serial	Code	Cost Total	Average Rate	Time Total	Time Billed	Time Package	Calls Total	Calls Not Zero	Calls Success	Calls Busy	Calls No Channel	Calls Error	ASR Std	ASR Cur	ACD Std	ACD Cur	PDD Avg	SCD Avg	CDRs List
origination					683.3009	1.5020	461.43	454.93	75.22	214	177	177	14	16	7	89.39	82.71	2.61	2.61	0.00	0.00	
termination					-112.2755	0.2468	461.43	454.93	0.00	214	177	177	14	16	7	89.39	82.71	2.61	2.61	0.00	0.00	

 If the data is grouped in the report, it will be shown initially collapsed. To expand or collapse data in your report, click the  plus or  minus signs.

To expand all data in the report, please press Ctrl + the  icon.


 Please note, the system shows rounded values in the reports. But while calculating the system takes an exact value. Hence, the procedure of the rounding is following:

- system rounds currency values according to the settings of a respective currency;
- the parameters of the time are rounded to the nearest hundredth. For example, 4.8763 to 4.88;
- and others are rounded to the nearest ten thousandth. For example, 3.879256 to 3.8793.

Simple scheme: how to generate a summary report

In order to create a simple summary report you need to:

- Choose respective **"Filters"** for the report.
- Enter the interval.
- Select some parameters in the **"Group By"** field, for example, *Currency, Leg Origin*.
- Then choose **"Columns"** in the Output form, for example, *Average Rate, ASR Std, ASR Cur, ACD Std, ACD Cur, Calls Total*.
- Leave **"Type"** *Web/Grouped* settings by default.
- Specify the currency and choose the code deck (if applicable).
- Click the **"Query"** button.

 If you want to **sort already grouped data** in columns, select respective parameters in **"Order By"**. Also, you can sort from highest to lowest values (or vice versa).



Please note, the **"Order By"** option is active when the **"Type"** of the Output form is **Plain**. When it is **Grouped**, the data is only sorting by values specified in the **"Group By"** field.

To create query template

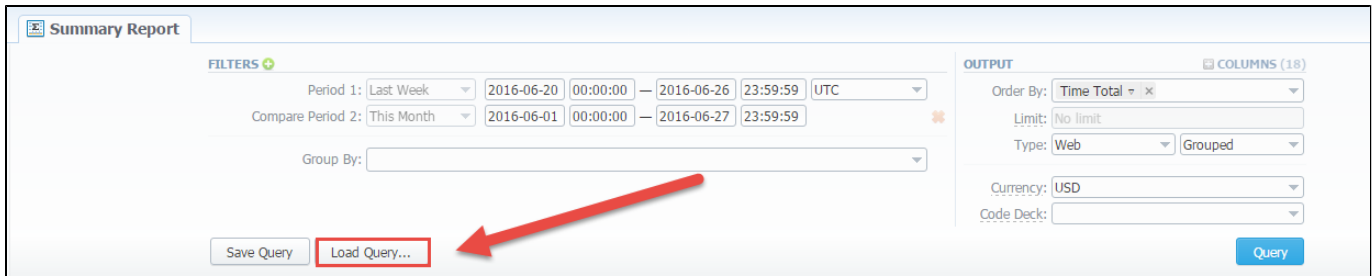
Also, you can create a template for reports and save specified parameters by clicking **"Save Query"** button. A pop-up window with settings will appear and you need to fill out the following form:

Screenshot: New Template form

Section	Description
Summary report	Here you can specify parameters for the template that will be used while running reports
	Title Specify a name of the template
	Reseller Indicate a Reseller for the report template
	Visibility It allows controlling visibility of respective reports templates. Whether you want to keep templates private or leave them visible for users under specified Reseller. To enable this option, select one parameter from the drop-down list: <ul style="list-style-type: none"> • Public - available for users according to the settings of the "Reseller" field; • Private - accessible strictly for creator.
Watch	This tool allows to generate reports at the appropriate time and send results to the list of e-mails
	Please note, that this tool is not available for <i>Web</i> output type, only for <i>CSV/Excel XLS/Excel XLSx</i> .
	Recipients Specify recipients, you can indicate your own e-mail or other users of the system, or even 3rd parties
	Run Time Mention an appropriate time to automatically generate a report, it could be several times, for example: "10:00, 12:00, 18:00"
	Days of Week Mention days of a week to automatically generate a report. For example, you can run a report only on Monday or each day of week
Report Query	Here you need to specify filters that will be used for generating correct report and choose the output type to view the report


To load already existed templates while generating statistic reports click **"Load Query"** button in the *Summary Report* section.


Screenshot: Summary Report form








Summary Report toolbar: export, chart.










You can export data to a CSV and XLSx file which contains only currently presented data, no automatic request to update data while exporting. Also, it is possible to create charts for easily illustrating a crucial information. And you can generate a report using the same criteria in the *Orig-Term report* and the *CDRs list sections*.

1. To download a report in .csv, click the "Export to CSV"  button on the toolbar.

 Please note, this button will be visible only when the "Type" of the output is "Plain". For the "Grouped" output type it is not available.


2. To download a .xlsx file, click the "Export to XLSx"  button on the toolbar.
3. To create a visual chart, click the "Show Chart"  button on the toolbar. There is more information available on this topic in the article "How to create a statistic chart?" at our Knowledge Base.
4. You can generate a detailed report using the same criteria in the CDRs list by clicking the *CDRs list icon*  on the toolbar.
5. And it is possible to generate a report using the same criteria in the Orig-Term report by clicking the *Orig-Term icon*  on the toolbar.
6. You can check an **actual date interval** of the report by clicking the *Info icon*  and it could be different from the *Interval* specified above if there is no date for the period.

Screenshot: Summary Report section

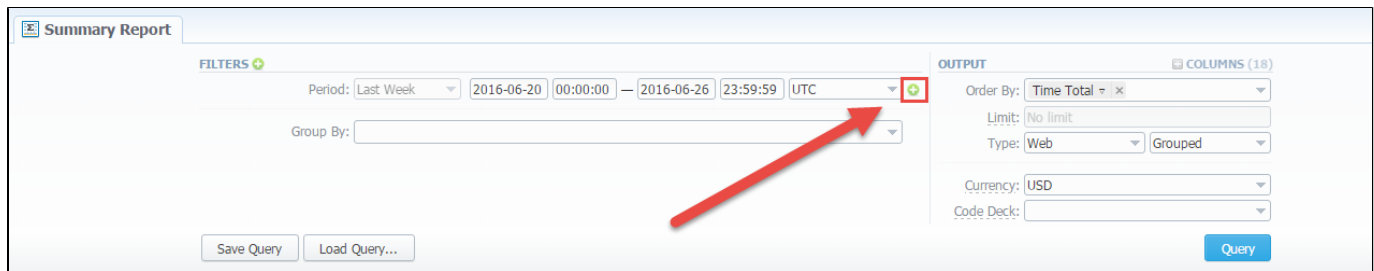
Call Origin	Year	Client Type	Cards Serial	Code	Cost Total	Time Total	Time Billed	Average Rate	CDRs List	Time Package	Calls Total	Calls Not Zero	Calls Success	Calls Busy	Calls No Channel	Calls Error	ASR Std	ASR Cur	ACD Std	ACD Cur	PDD Avg	SCD Avg
origination	2016	Client	N/A	1191	11.056800	2 516.23	2 516.23	0.004394		39.00	757	736	757	0	0	0	100.00	97.23	3.32	3.42	0.00	0.00
termination	2016	Client	N/A	1191	-16.056927	2 415.73	2 415.73	0.006647		0.00	727	706	727	0	0	0	100.00	97.11	3.32	3.42	0.00	0.00
origination	2016	Client	N/A	936	263.729982	2 030.58	2 030.58	0.129879		24.40	489	489	489	0	0	0	100.00	100.00	4.15	4.15	0.00	0.00
termination	2016	Client	N/A	936	-196.204509	1 927.25	1 927.25	0.101805		0.00	468	468	468	0	0	0	100.00	100.00	4.12	4.12	0.00	0.00
origination	2016	Client	N/A	200	234.807556	507.75	507.75	0.462447		0.00	137	137	137	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00
termination	2016	Client	N/A	200	-1.151089	507.75	507.75	0.002267		0.00	137	137	137	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00
origination	2016	Client	N/A	1201555	1.513409	332.43	332.43	0.004553		0.00	243	243	243	0	0	0	100.00	100.00	1.37	1.37	0.00	0.00
termination	2016	Client	N/A	1201555	-1.064259	332.43	332.43	0.003201		0.00	243	243	243	0	0	0	100.00	100.00	1.37	1.37	0.00	0.00
termination	2016	N/A	N/A	mismatched	N/A	219.08	0.00	N/A		0.00	59	59	59	0	0	0	100.00	100.00	3.71	3.71	0.00	0.00

Side-by-side report

This tool allows building a report with side-by-side sub-reports. Use it to run a comparative analysis on the same page. It's helpful for reviewing multiple parameters, totals and compare results at different time intervals. The "Compare Period" option is designed to create a report that shows two sub-reports side-by-side.

To enable this option, click the plus sign  next to the "Period" and specify both intervals (Period 1/Period 2) for the report.

Screenshot: Summary Report section

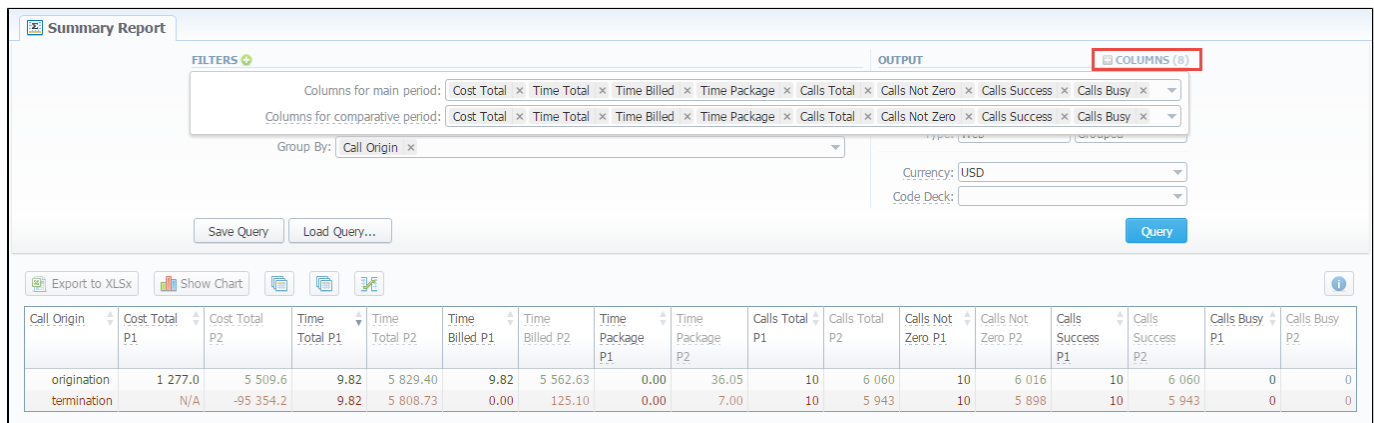


After, choose columns for main and comparative period in the report output form. When all required parameters are specified, click the "Query" button.

To remove this filter, please click the delete icon ✖.

You can modify a comparative mode by changing periods and columns. For example, to compare how different the cost total of the two periods is in percentage terms. To do this, choose the "Cost Total (%)" value from the Columns. Therefore, the final report splits Cost Total (%) into separate columns (see screenshot below).

Screenshot: Summary Report section



When you use "Compare Period" option in the Summary Report and Orig-Term Report sections, default chart templates will not be accessible.

Knowledge Base Articles

- [Why are there differences between reports?](#)
- [How to hide rates in Summary Report for specific system users?](#)