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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 to find an answer to your questions.

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

Interface Basics

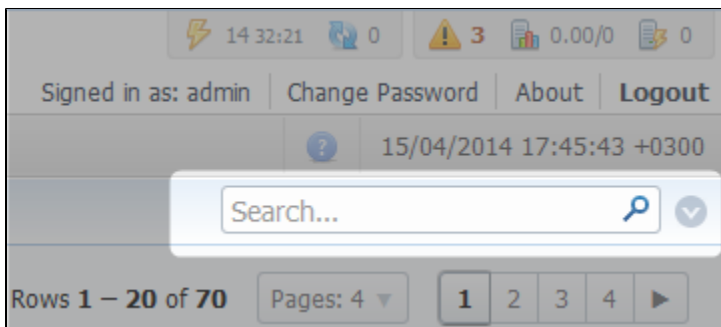
On this page

- [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.:

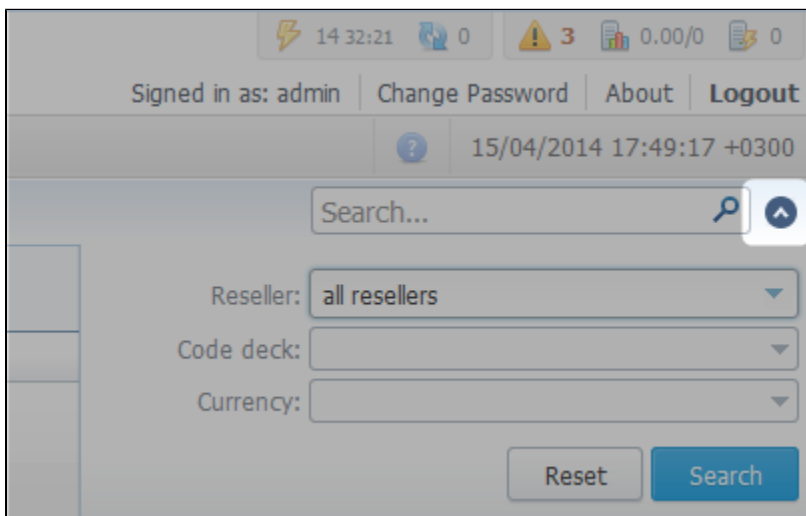
Screenshot: Quick Search panel



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

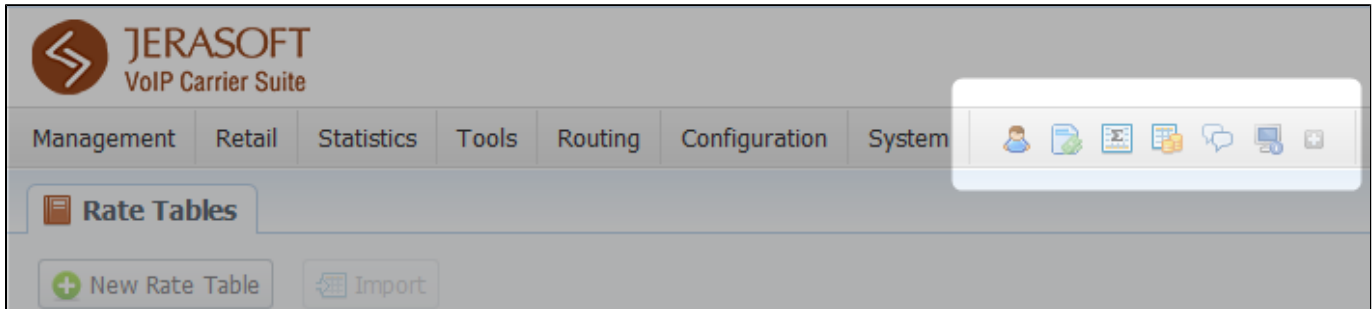


Note: If the arrow button has red color, this means that search is performed on selected parameters.

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*

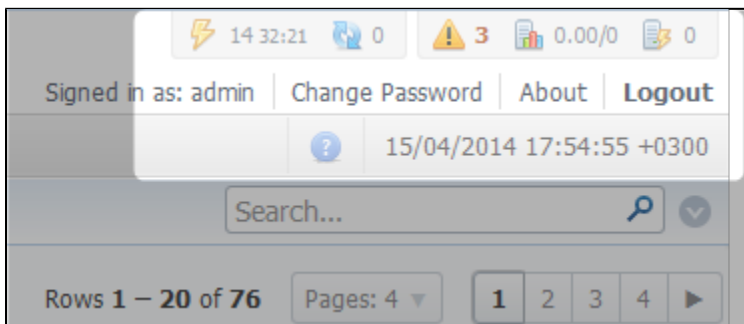


To add a shortcut of any section to SmartBar, press "+" button near section's name. To remove the shortcut, press "-" button at same location.

InfoBar

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

Screenshot: *The InfoBar*



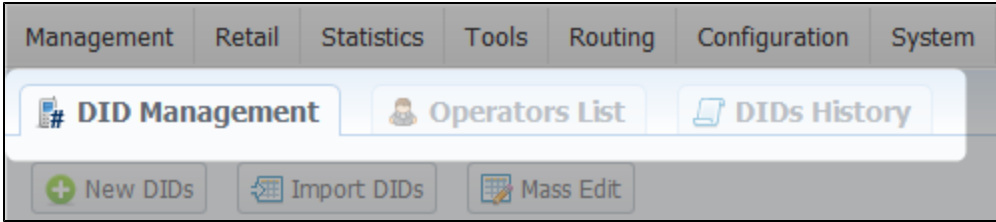
It is situated at top-right part of the screen and displays the following information:

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

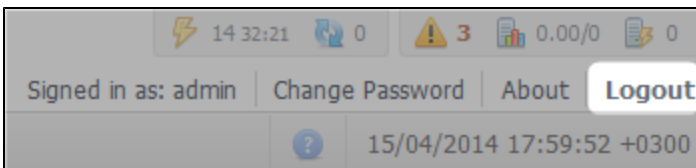
The screenshot shows a 'Change Password' form. At the top left, there is a title 'Change Password' with a key icon. The form contains three input fields: 'Old password:', 'New password:', and 'Confirm password:'. An 'OK' button is located at the bottom right of the form.

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 section of our Guide contains information about how you can provide different management through JeraSoft VCS. For more details please go to the related sections:

- [Clients](#)
- [Accounts](#)
- [Rate Tables](#)
- [Invoices](#)
- [Transactions](#)
- [Balance Report](#)
- [Resellers](#)

Clients

On this page

- [Clients List](#)
- [Adding New Client](#)
- [Clients Templates](#)
- [Knowledge Base Articles](#)

Clients List















This section is used to manage your customers, providers and all related information. 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 prepaid mode is enabled, calls will be subject to balance check on stage of call authorization (when RADIUS Authorization is used). If 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 a range and narrow down 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 arrow button.



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

Screenshot: *Quick Search form*

Group:

Orig Group:

Term Group:

DID Group:

Status:

Reseller:

Type:

Account:

Account IP:

Payment Terms:

ORIG Rate Table:

TERM Rate Table:

Routing Plan:

Client ID:

If there is a need to **change last invoiced 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

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

Adding New Client

To add a new customer, click **"New client"** button. A dialog-window will show up:

Screenshot: Adding new client

Client Info
Custom Fields
Presets
DIDs
Notes

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Timezone:

Status:

Client's Template:

Groups:

Tax Profile:

Bill Calls by:

Hidden Numbers

CLIENT 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:

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:

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 	Specify the timezone (will be used in invoices). <div style="border: 1px solid #ffc107; padding: 5px; margin-top: 10px;"> If this parameter is not indicated, the timezone of database will be automatically applied to the client's settings of zone. It could lead to some problems while working with packages, rate tables, time profiles. </div>
	<ul style="list-style-type: none"> Status 	Current client status
	<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 	You can specify a tax profile which will be reflected in invoices (refers to <i>Taxes Profiles</i> section)	

	<ul style="list-style-type: none"> • Bill Calls By 	Select how the system should bill calls of current client – by setup time, connect time or disconnect time (most switch models use disconnect time)
	<ul style="list-style-type: none"> • "Hidden Numbers " check box 	Allows you to hide some part of numbers from calls made by this client in invoices, CDR's reports and during export
"Client Panel" check box	<p>Activates/deactivates the log in procedure to the client's control panel for 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. 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>	
	<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
Originator Settings	Settings for your customers, who send calls to your switch. Current clients' billing settings are specified here	
	<ul style="list-style-type: none"> • "Postpaid" check box 	Here you can set specific paid mode for a client. If postpaid mode is enable the client has unlimited credit. It is disabled by default.
	<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"> • 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"> • Capacity 	Summary origination capacity for this client
Terminator Settings	Settings for your vendors, whom you send calls from your switch. Current clients' billing settings are specified here	
	<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 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 Authorize.net electronic payment service. Please note that you can register a credit card via <i>Refill balance section in the Client's panel</i> . To open <i>Client's panel</i> , please click the icon  in the <i>Client's List</i> .	
	<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
	<ul style="list-style-type: none"> • Billing E-mail 	Automatically generated invoices and notifications will be sent on this e-mail address
	<ul style="list-style-type: none"> • Rates E-mail 	Company e-mail for rates related questions
	<ul style="list-style-type: none"> • Address 	Physical company address
	<ul style="list-style-type: none"> • Tax ID 	Customer's tax ID

<ul style="list-style-type: none"> • Reg ID 	Customer's registration ID
<ul style="list-style-type: none"> • Account Details 	Reference information about client's bank account or payment details
<ul style="list-style-type: none"> • Locale 	Preferred locale, that will be sent as reply to RADIUS Authorization. It is used for IVR platforms to predefine 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 client from 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](#)

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*

The screenshot shows a web interface for managing custom fields for a client. At the top, there are navigation tabs: "Client Info", "Custom Fields", "Presets", "Packages", "DIDs", and "Notes". The "Custom Fields" tab is active. The interface includes two input fields labeled "simple key 1:" and "simple key 2:". At the bottom right, there are three buttons: "OK", "Cancel", and "Apply". The client name "Customer A" is displayed in the top right corner.

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*

The screenshot shows the "Custom Fields" section for a reseller. It features three main tabs: "Edit Reseller", "Custom Fields", and "Rates Notifications". The "Custom Fields" tab is active. Below the tabs, there are two sections: "CUSTOM FIELDS" and "CUSTOM PACKAGE FIELDS". Each section has an "Add Custom Field" button and a table with columns for "Field Key" and "Title". In the "CUSTOM FIELDS" section, the "Field Key" is "Custom_Field_1" and the "Title" is "Title_Custom_Field_1". In the "CUSTOM PACKAGE FIELDS" section, the "Field Key" is "Custom_Package_Field_1" and the "Title" is "Title_Custom_Package_Field_1". At the bottom right, there are three buttons: "OK", "Cancel", and "Apply". The reseller name "New Reseller A" is displayed in the top right corner.

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.

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: Clients Templates List

ID	Name	Credit	ORIG Rate Table	Routing Plan	Groups	Reseller
7	Client A	1 000.00 USD	Profit	DR: Proportional		Company Name
8	Client B	1 500.00 EUR	Rate-Caribbean	DR: Routes Testing		Reseller_A
9	Client C	10 000.00 UAN	Figaro	DR: Complex Quality		Company Name

To create new template you need to click on respective "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

New Client Template

SYSTEM INFORMATION

Name:

Reseller:

Currency:

Groups:

ORIGINATOR SETTINGS

Credit: USD

Rate Table:

Routing Plan:

Orig Groups:

Capacity: channels

LOW BALANCE NOTIFICATION

Notify Client: USD

Notify Admin: USD

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 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 the appropriate routing plan that will be used to route all calls of this customer
<ul style="list-style-type: none"> Capacity - Summary origination capacity for the client 	

	<ul style="list-style-type: none"> • Orig Groups 	Set routing groups where origination accounts of current client will belong to
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, the 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, the system will send a notification to administrator via <i>Events Log</i>



Tip: Clients Templates allows you to fill out customer's settings with **standard default values**. These values are automatically overridden from templates for following fields: Groups, Credit, Rate Table, Routing Plan, Orig Groups, Capacity, Notify Client, Notify Admin.

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 be 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.

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 "Clients 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*

The screenshot shows the 'New Client' configuration interface. It is divided into several sections: SYSTEM INFORMATION, ORIGINATOR SETTINGS, COMPANY INFO, CLIENT PANEL, and TERMINATOR SETTINGS. In the SYSTEM INFORMATION section, the 'Client's Template' dropdown menu is highlighted with a red box. In the bottom right corner, the 'Apply' button is also highlighted with a red box.

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

<p>SYSTEM INFORMATION</p> <p>Name: <input type="text"/></p> <p>Parent: <input type="text" value="...root..."/></p> <p>Currency: <input type="text" value="USD"/></p> <p>Status: <input type="text" value="Active"/></p> <p>Client Template: <input style="border: 2px solid red;" type="text"/></p> <p>Tax Profile: <input type="text"/></p> <p>VoIP Gateways: <input type="text"/></p> <p>TERMINATOR SETTINGS</p> <p>TERM Rates: <input type="text"/></p> <p>TERM Capacity: <input type="text"/></p> <p><input type="checkbox"/> FRAUD PROTECTION</p> <p>Notification frequency: <input type="text" value="10"/></p> <p>Skip digits: <input type="text" value="0"/></p> <p><input type="checkbox"/> MAIL TEMPLATE: INVOICE</p> <p><input type="checkbox"/> MAIL TEMPLATE: PAYMENT REMINDER NOTIFICATION</p> <p><input type="checkbox"/> MAIL TEMPLATE: LOW BALANCE NOTIFICATION</p> <p><input type="checkbox"/> MAIL TEMPLATE: RATES NOTIFICATOR</p> <p><input type="checkbox"/> MAIL TEMPLATE: FACTORS WATCHER</p> <p><input type="button" value="Full Delete"/></p>	<p>ORIGINATOR SETTINGS</p> <p>Postpaid: <input type="checkbox"/> <input type="text" value="0"/> USD</p> <p>ORIG Rates: <input type="text"/></p> <p>ORIG Capacity: <input type="text"/></p> <p>INVOICING INFORMATION</p> <p>Date: <input type="text" value="Real date"/></p> <p>Template: <input type="text" value="default PDF"/></p> <p>No. Tpl: <input type="text"/></p> <p>Last No: <input type="text"/></p> <p>EMAIL RATES IMPORT SETTINGS</p> <p>Host: <input type="text"/></p> <p>Port: <input type="text"/></p>	<p>CONTACT INFORMATION</p> <p>E-mail: <input type="text"/></p> <p>Postal Address: <input type="text"/></p> <p>Tax ID: <input type="text"/></p> <p>Reg ID: <input type="text"/></p> <p>Bank Account: <input type="text"/></p> <p>COMPANY LOGO</p> <p><input type="button" value="Choose File"/> No file chosen</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Screenshot: Applying template in Manager's settings

Edit Reseller AUTO Manager - 111

<p>SYSTEM INFORMATION</p> <p>Name: <input type="text" value="AUTO Manager - 111"/></p> <p>Parent: <input type="text" value="AUTO Reseller - 111"/></p> <p>Status: <input type="text" value="Active"/></p> <p>Client Template: <input style="border: 2px solid red;" type="text"/></p> <p>CONTACT INFORMATION</p> <p>E-mail: <input type="text"/></p> <p>Postal Address: <input type="text"/></p> <p><input type="button" value="Full Delete"/> <input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/></p>

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

Screenshot: New Client Template

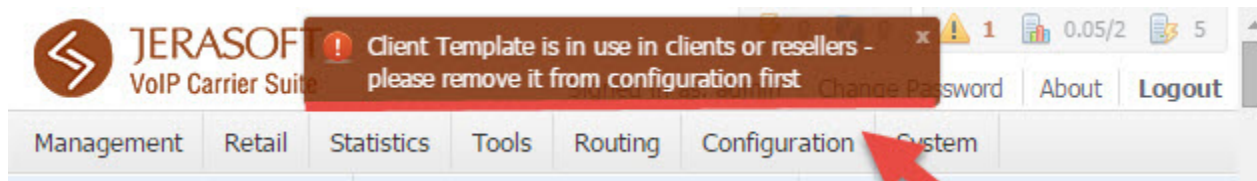
Tip: Please be advised that values overridden from templates, i.e. *Routing Plan*, *Rate Table*, *Credit*, are displayed only on the Client list. They will not be shown on the Client's account.

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 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



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 possibility to **see the full list of templates that belong only to their Reseller**.


Screenshot: Client Template section

Presets and Translations

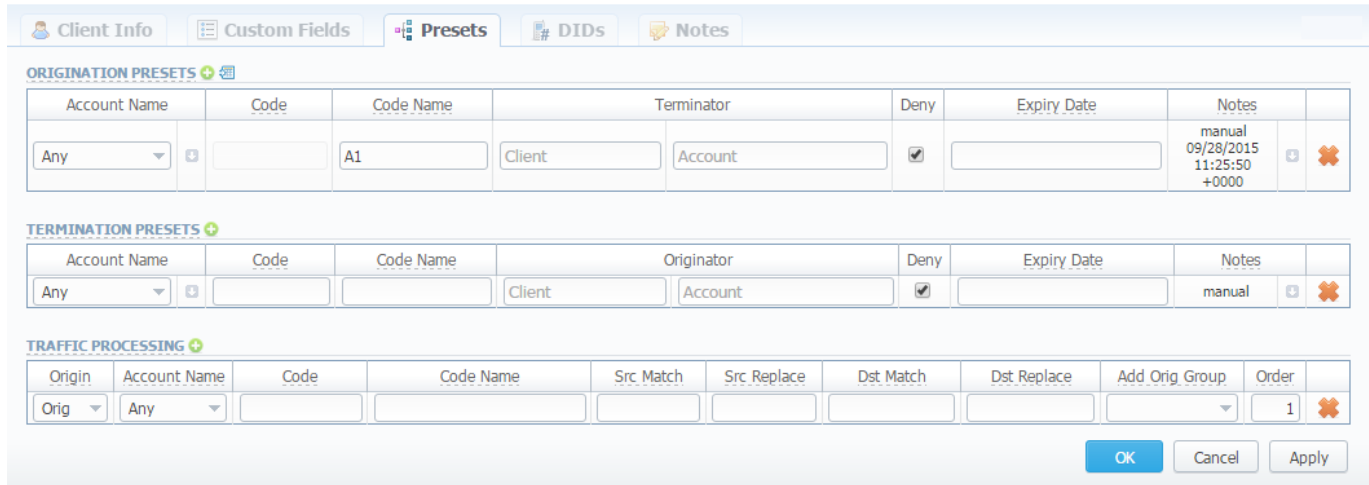
Client Presets Main Window

This tab provides the possibility to exclude (block) some routes from routing scheme and number of Translations.



To find this section on the *Management* menu, point to the respective *Client*, and then click *Presets*.



Also, you can open this tab from the full list of system by clicking  button and the window with configurations will appear.



Screenshot: Client presets



The screenshot shows the 'Client Presets' window with three main sections: 'ORIGINATION PRESETS', 'TERMINATION PRESETS', and 'TRAFFIC PROCESSING'. Each section contains a table of configuration fields.

Account Name	Code	Code Name	Terminator		Deny	Expiry Date	Notes	
Any		A1	Client	Account	<input checked="" type="checkbox"/>		manual 09/28/2015 11:25:50 +0000	 


Account Name	Code	Code Name	Originator		Deny	Expiry Date	Notes	
Any			Client	Account	<input checked="" type="checkbox"/>		manual	 

Origin	Account Name	Code	Code Name	Src Match	Src Replace	Dst Match	Dst Replace	Add Orig Group	Order	
Orig	Any								1	 

Buttons: OK, Cancel, Apply


Here you can add and remove routing presets either for origination or termination routes.

Adding Routing Presets

To add a route click a respective  button and enter all required information:

Field Name	Field Description
Account Name	Client's account, that should be used in current routing rule. You can click the arrow for additional information about assigned preset to respective Client (i.e. ID and Notes).
Code	Specify a code of destination (please use * as wildcard).
Code Name	Specify a code name or select it in this field.
Terminator	Specify a vendor or specific vendor's account for whom this routing rule will work (i.e all calls coming from clients to that specified vendor will be denied to route).
Originator	Define a customer for whom this routing rule will work.
Deny	Enable this to deny current route selection.
Expiry Date	Set a exact date for which the block should be active. If the field is empty it will never expire.
Notes	Shows, when and how the rule was originally added. <i>Manual</i> rules added using this section, <i>auto</i> rules added by Factors Watcher. Click arrow for additional information about the blocking factor that was used for the code or code name.

Presets "Mass Import" Feature

By pressing  icon near "*Origination Presets*" rubric 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 huge amount of presets.

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

Step 1. Selecting File and Specifying Additional Parameters

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



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

Screenshot: Presets "Mass Import" feature main window

Presets Import

FILE PROCESS

Select file to import: Choose File No file chosen

Fields Delimiter: autodetect

IMPORT PROCESS

Presets import mode: Add new presets

On duplicate presets: Update with latest value

Process >>

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

Field	Description	
Delimiter	Set delimiter for CSV file: comma, semicolon or tab	
Presets import mode	Select a type of import process	
	<ul style="list-style-type: none">• Add new presets	Add presets to already existing ones
	<ul style="list-style-type: none">• Add new presets (purge all existing)	Purge all existing presets and import new ones

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

Step 2. Recognizing The File

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 guess was not precise), and press "Process>>" again (Screenshot).

Screenshot: Presets "Mass Import" feature. Step 2

Presets Import

DEFAULT VALUES


Account name: Type: Expiry Date: Code deck:

ROWS AND COLUMNS SELECT

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Skip
Dest_name	Prefix	Day	Effective	<input type="checkbox"/>
	93	0.1826	01/05/2015	<input type="checkbox"/>
	93765	0.1925	01/05/2015	<input type="checkbox"/>
	93766	0.1925	01/05/2015	<input type="checkbox"/>
	93767	0.1925	01/05/2015	<input type="checkbox"/>
	9377	0.1925	01/05/2015	<input type="checkbox"/>
	9375	0.19	01/05/2015	<input type="checkbox"/>
	9370	0.1674	01/05/2015	<input type="checkbox"/>
	93711	0.1674	01/05/2015	<input type="checkbox"/>
	9378	0.1532	01/05/2015	<input type="checkbox"/>
	937	0.2	01/05/2015	<input type="checkbox"/>
	937280	0.184	01/05/2015	<input type="checkbox"/>
	93729	0.184	01/05/2015	<input type="checkbox"/>
	9379	0.184	01/05/2015	<input type="checkbox"/>
	93744	0.19	01/05/2015	<input type="checkbox"/>
	93747	0.19	01/05/2015	<input type="checkbox"/>
	355	0.1483	01/05/2015	<input type="checkbox"/>

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

Performing Number Translation

To perform a number translation, press  on *Traffic Processing* and fill the following fields:

Field Name	Field Description
Origin	Specifies, 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
Account Name	On Dynamic Routing, before sending calls to a terminator
	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 respect to 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 respect to settings in Dst Replace field
Dst Replace	Allows you to put matched calls into specified Origination Routing Group

Add Group	Allows you to put matched calls into specified Origination Routing Group
Order	Sets rules ordering, first matched rule will stop further number translations

These translation rules use regular expressions syntax. For example, if 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 range. For example \$rnd(050-950)\$ will be replaced by 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**.

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		✖	



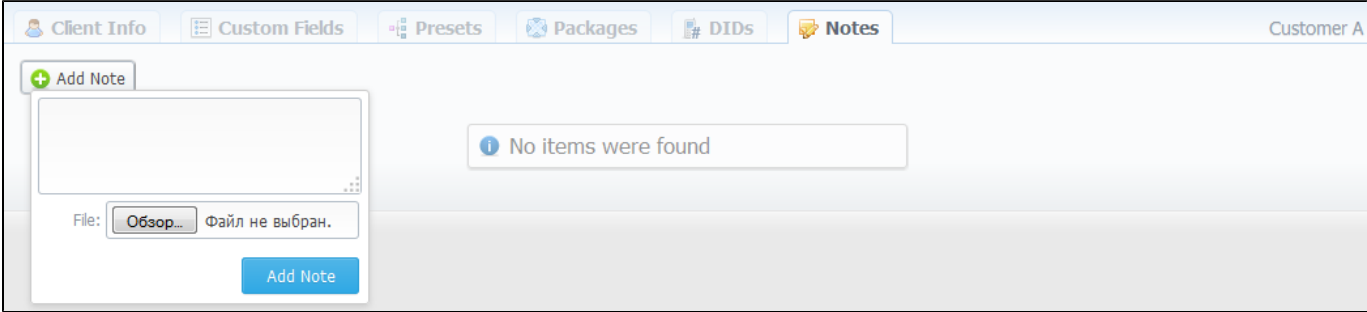
Please note that "Add DID" button is visible only if a client has at least one account and activated package. Plus you can assign only defined number of DIDs, the number which you previously specified during package creation.

Notes

This function 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 new note go to the "Note" tab, press "Add Note" button, enter the message or select a file and press "OK" button (Screenshot):

Screenshot: Adding new note



Accounts

On this page

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

Accounts List

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

Screenshot: Accounts Main Window Section



ID	Client	Account	Name / ANI / IP	Tech Prefix	Orig Details	Term Details
399	Test Customer	account_11	Name: test_account	admin	RT: Expensive table	RT: — TC: —
398	Test Customer	account_12	IP: 111.11.1.11/32		RT: —	RT: — TC: —
397	Test Customer	account_13	Name: test2_account		RT: —	RT: VOX TC: —
396	Test Customer	account_14	IP: 111.20.1.57/32		RT: ORIG RT - Test Radius	RT: — TC: —
395	Test Customer	account_15	Name: test4_account		RT: —	RT: — TC: —
403	Test Customer	account_16	ANI: 55454		RT: ORIG RT - Test S GR: Orig Group 7	RT: Expensive table TC: —
404	Test Customer	account_17	ANI: 5454456		RT: —	RT: GO-Cloudex GR: Test_TermGroup 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
	Using the following icon, you can filter accounts by a client
	Using the following icon, you can open the Clients List section

Quick Search filters (Screenshot below) in the Accounts section main window helps in finding accounts (for instance, accounts belonging to a certain Client etc.). To open this form click on the arrow button.

Screenshot: Quick Search form

Search...  

Name:

IP:

ANI:

Tech Prefix:

Origination:

Orig Rate Table: ▼

Routing Plan: ▼

Termination:

Term Rate Table: ▼


Client Type: ▼

Client ID:

Adding New Account



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

Screenshot: Adding new account

 **New Account**

GENERAL	<input checked="" type="checkbox"/> ORIGINATOR SETTINGS	<input checked="" type="checkbox"/> TERMINATOR SETTINGS
Client: <input type="text"/>	Rate Table: <input type="text"/> ▼	Rate Table: <input type="text"/> ▼
Name: <input type="text"/>	Routing Plan: <input type="text"/> ▼	Groups: <input type="text"/> ▼
IP: <input type="text"/>	Groups: <input type="text"/> ▼	Capacity: <input type="text"/> Protocol: <input type="text"/> ▼
Tech Prefix: <input type="text"/>	Capacity: <input type="text"/>	Proxy: <input type="text"/> Port: <input type="text"/>
Password: <input type="text"/>		
VoIP Gateway: <input type="text"/> ▼		
Notes: <input type="text"/>		

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 specify the one from the drop down list:</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 – 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 capacity for respective traffic direction</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.



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.

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

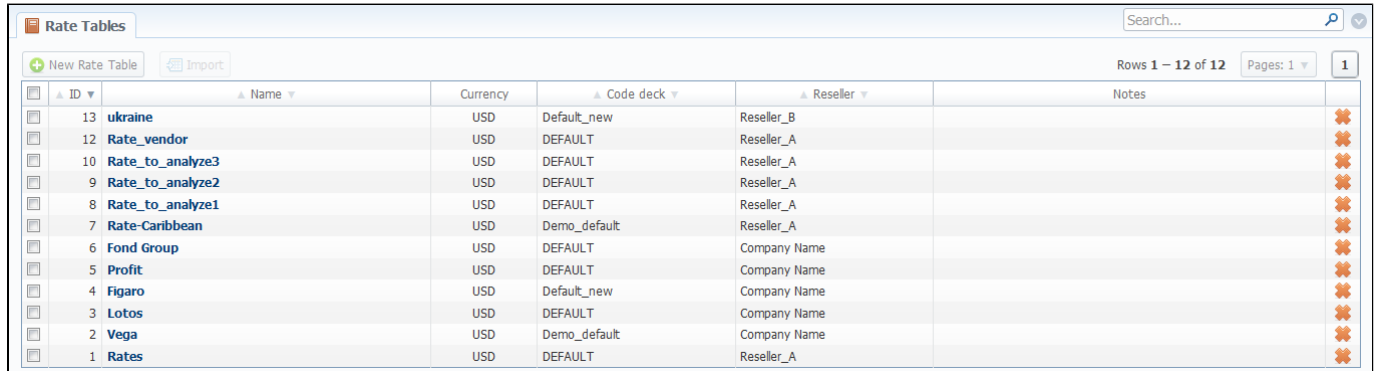
On this page

- [Rate Tables List](#)
- [Adding New Rate Table](#)
- [Configuring The Rates](#)
- [Knowledge Base Articles](#)

Rate Tables List

Allows you to manage your rate tables. Main window of this section is presented on screenshot down below:

Screenshot: Rate Tables section main window

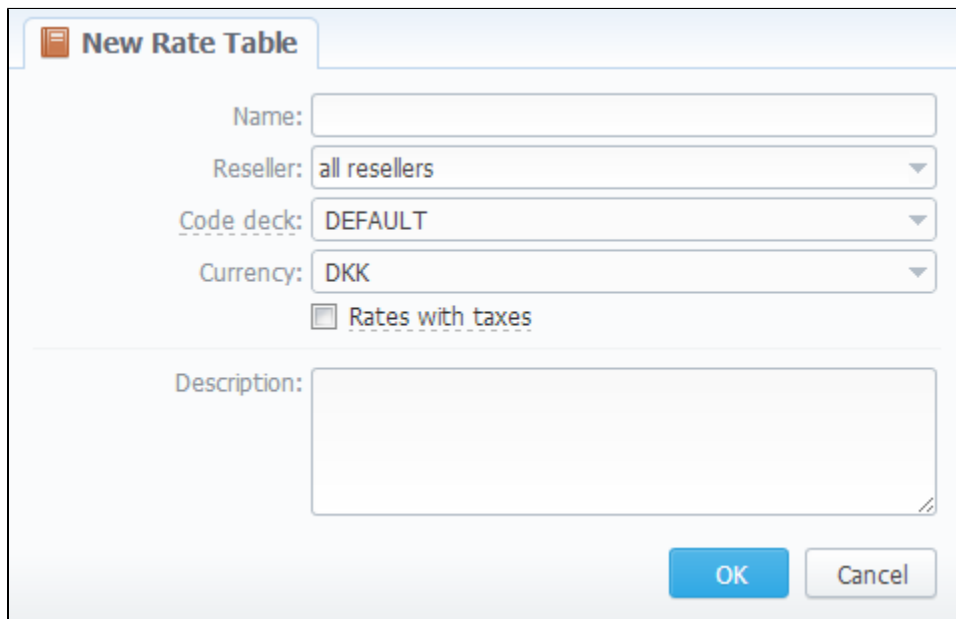


ID	Name	Currency	Code deck	Reseller	Notes
13	ukraine	USD	Default_new	Reseller_B	
12	Rate_vendor	USD	DEFAULT	Reseller_A	
10	Rate_to_analyze3	USD	DEFAULT	Reseller_A	
9	Rate_to_analyze2	USD	DEFAULT	Reseller_A	
8	Rate_to_analyze1	USD	DEFAULT	Reseller_A	
7	Rate-Caribbean	USD	Demo_default	Reseller_A	
6	Fond Group	USD	DEFAULT	Company Name	
5	Profit	USD	DEFAULT	Company Name	
4	Figaro	USD	Default_new	Company Name	
3	Lotos	USD	DEFAULT	Company Name	
2	Vega	USD	Demo_default	Company Name	
1	Rates	USD	DEFAULT	Reseller_A	

Adding New Rate Table

To add a new rate table, press "New Rate Table" button, define name, currency of the rate table, code deck that will be tied to this rate table, reseller, tax settings and value and description as you can see on the screenshot below. 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, press "OK" button. New rate table will appear on the list.

Screenshot: Adding new rate table



New Rate Table

Name:

Reseller:

Code deck:

Currency:

Rates with taxes

Description:

Configuring The Rates

To configure the rates, click on the table's name.

The rate management is executed with next six tabs:

Tab	Description
Rates	Rates configuration
Extra	Extra rates configuration
Simulate	Call simulation tool
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

Knowledge Base Articles

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

Rates Tab Description

On this page

- [Rates Section Tab](#)
- [Adding New Rate](#)

Rates Section Tab

You can select different rates with different tariffication parameters for each code (Screenshot):

Screenshot: Adding new rates

Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
1	USA	2.0000	0.0000	2014-07-09 00:00:00+00	1	1	TP: all time
1203555	USA DQ	0.0000	0.0000	2014-07-09 00:00:00+00	1	1	TP: all time
1204	CANADA MANITOBA PROPER	0.0010	0.0000	2014-04-09 21:00:00+00	1	1	TP: all time
1205555	USA DQ	2.1000	0.0000	2014-07-09 00:00:00+00	1	1	TP: all time
1207554	USA PREMIUM	2.5000	0.0000	2014-07-09 00:00:00+00	1	1	TP: all time

Adding New Rate

To create a new rate line, press "Add Rate" button and fill next fields:

Field	Description
Code	A destination code
Code Name	Name of code group (available if code deck is attached)
Rate	Price per 1 minute of call
Changes	A field that 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 Fields	Additional parameters are stored under icon
• Rate Group	Specify group for jurisdictional billing

<ul style="list-style-type: none"> • End Date 	After specified date the rate would not be used
<ul style="list-style-type: none"> • Profile 	Which time profile will be used for current rate
<ul style="list-style-type: none"> • Setup Fee 	Setup fee (charged when call duration is longer then 0 seconds)
<ul style="list-style-type: none"> • Grace Time 	Time interval that will not be tarificated (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
<ul style="list-style-type: none"> • Notes 	Additional information about current rate

After you finish filling all fields, press "" button.



Tip: On top of the page there is a search engine, that allows you to search for rates (codes or code names) by using * as a wildcard, and also allows to sort whole table by few criteria: confirmed/unconfirmed and rate actuality (including old, current, future and current+future templates).



Tip: If you see rate row colored in yellow, this means that it is in *pending* state and needs to be confirmed. To do so, check respective rate and click "Confirm" button.

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

This tab allows you to apply an "extra charge" for calls belonging to defined origination group. To utilize this function, first you should go to *Configuration – Client Groups* and create an *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 this is decided, 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 on respective "Add Rate" button.

Screenshot: Extra tab - Rate Tables section

Orig Groups	Profile	Extra Rate
Test_OrigGroup	all time	10.000

Field	Description
Group	Define an account group which will have an "extra charge" for calls
Profile	Specify a time profile for the current rate
Extra Rate	Set extra rate for calls of defined account group

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', 'Date' (set to 2014-07-09 10:50:52), and 'Duration' (set to 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 show 'Number: 1204', 'Date: 2014-07-09 11:01:39', and 'Duration: 60 sec'. The main area displays a table with the following data:

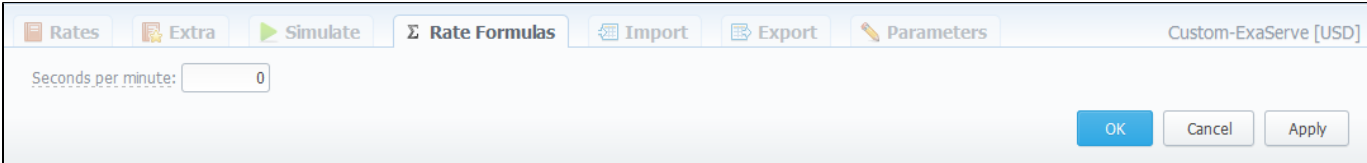
Code	Call Cost	Effective Date	Rate	Parameters	Billed Time
1204 CANADA MANITOBA PROPER	0.0010 USD	09/04/2014 21:00:00 +0000	0.0010 USD	1 / 1 / 0	60 sec

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).

Screenshot: Rate tables Import section tab

Rates Importing Process

Whole import process can be logically divided in 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	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: <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 <i>"Date Format"</i> field	
On duplicate rates	Decide what to do if a duplicate is found	
	• Update with latest value	If multiple duplicates were found, the last value is stored
	• Skip duplicate rows	If there are multiple duplicates, only first value will be stored
	• Alert me about duplicates	If duplicate is found, VCS will alert you about their presence
"Full A-Z import" Checkbox	If enabled, all existing rates which are not presented in the current importing process will be closed by specified <i>Close date</i>	
Close date	End date of existing rates which are not presented in the current importing process. Please notice this field works only if <i>"Full A-Z import"</i> checkbox is enabled	
Import template	Select the rate table template for rates importing	
Deck update mode	Decide how you want a code deck to be updated	
	• Do not import anything	Leave selected code deck unchanged
	• Import only not existing codes	Code deck will be updated with codes and their names, if it doesn't currently have this information
	• 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
• 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	Decide, what system should do if file contains an error (data inconsistency, incorrect symbols etc.)	
	• Import correct rows and show all found errors	Import error-free rows and display the list of errors, if any
	• If errors are found, abort import and show all errors	If any error is found, stop import and display a list of errors
Notificator Code Deck	Specify code decks, that will be used for the next rates notification	
"Enable confirm mode" Checkbox	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" Checkbox	Enable for shortening codes of the code range which are importing	

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

Step 2. Recognizing The File

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 guess was not precise), and press *"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 press the *"Save Template"* button, specify a template name in the pop-up window and press *"Save"* button (Screenshot).

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"/>

After you press "Process>>" for the last time, system will start importing process. When 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 already imported at least one file, during new importing process you will also see the history table. This table consists of files which were imported and represents some information about them (Screenshot).

Screenshot: Import History Table

IMPORT HISTORY (LAST IMPORT OPERATIONS)

Rows 1 - 5 of 5 Pages: 1 1

Date	Login	File	New	Increased	Decreased	Unchanged	Pending	Closed	Total
2014-07-14 16:10:13+03	admin	 arustel cropped.xls	0	0	0	7	7	0	7
2014-07-14 16:08:19+03	admin	 arustel cropped.xls	1	0	0	7	0	0	8
2014-07-14 16:07:26+03	admin	 arustel cropped.xls	2	3	2	0	0	6089	7
2014-07-10 18:01:13+03	admin	 00 wholesale full.xls	0	0	0	6094	0	0	6094
2014-07-10 18:00:11+03	admin	 00 wholesale full.xls	6094	0	0	0	0	0	6094

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 quantity of rates, that remained unchanged
Pending	The number of rates, that should be additionally confirmed

Closed	The quantity of rates, that were closed by specified "End Date" or using "Full A-Z import" functionality
Total	The total amount of imported rates

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. After keep the procedure in the same as a usual rates importing.

Screenshot: Mass rates importing.

Import

Code	Code Name	Description	Rate table
		RATE TABLE: FGJ	
		Imported rows: 13449 ; Rows with errors: 0	
		RATE TABLE: TESTTG	
		Imported rows: 13449 ; Rows with errors: 0	
		RATE TABLE: TESTTG2_LONG_LONG_LONG_LONG_LONG_LONG_LONG_LONG_JOHNSON	
		Imported rows: 13449 ; Rows with errors: 0	

Close

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' tab in a software interface. The window title is 'Custom-ExaServe [USD]'. The interface is divided into several sections:

- TEMPLATE SETTINGS:** Includes an 'Export Template:' dropdown 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', 'Interval', 'Profile', 'Setup Fee', 'End Date', and 'Grace Time'.
- 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 also 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 others are empty.
- HEADER TEXT** and **FOOTER TEXT** sections are present but empty.
- At the bottom right, there are 'Process' and 'Cancel' buttons.

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"> 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'. The 'AUTOMATIC EMAIL IMPORT' checkbox is checked. The fields to be filled are: Login, Password, Sender Match, Subject Match, and Import Template. Below the form, the 'TABLE INFORMATION' section shows it was created on 04/02/2013 15:57:23 +0200 and last edited on 08/28/2014 12:56:02 +0200. Buttons for 'OK', 'Cancel', and 'Apply' are at the bottom right.

Field	Description
Login	Specify the login of an email box
Password	Enter a password of the specified email <div style="border: 1px solid orange; padding: 5px; display: inline-block;"> 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*

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 "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										
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	2013-07-16	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	2013-07-16	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
	<div style="border: 1px solid green; padding: 5px;">  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. </div>


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

New Invoice

Client / Reseller: 

Period: last week 2013-08-19 — 2013-08-25 Asia/Riyadh

Type: outgoing Currency: USD

Invoice No: (empty = auto) State: normal

Invoice Date: Due: days


Comments:


Action: Generate new invoice

Template: default | PDF

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 the 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

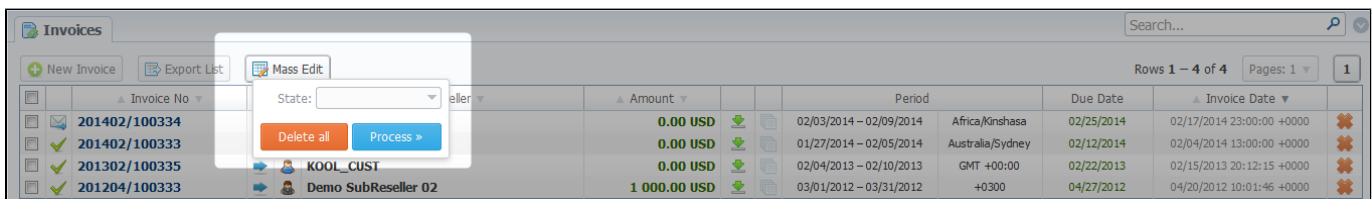
State	Select the state of this newly created invoice (<i>to send, to verify or normal</i>)
Invoice Date	Specify the actual invoicing date
Due (days)	Indicate the payment due in days
Comments	Leave comments
Action	Using the drop down menu select an appropriate action: <i>"Generate new invoice"</i> or <i>"Attach existing invoice"</i> . When <i>"Attaching existing invoice"</i> 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.
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	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*.

 Please note, the **system shows rounded values** in the invoices to the nearest **ten thousandth**. For example, 3.879256 to 3.8793. But while calculating the system takes an exact value.

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 system. Main window is displayed as a list of performed payments:

Screenshot: Transactions section main window

ID	Payment Account	Client / Reseller	Amount	Taxes cost	Comments	Transaction Date
6686	Charge: Products	Customer F	-85.00 DKK	0.00 DKK	Package periodical payment: CP - Go - 2 Lines + 10 Numbers	30/08/2013 12:06:14 AST
6685	Charge: Products	Customer J	-7.00 USD	0.00 USD	Package periodical payment: EC - Go - Extra 10 Numbers	30/08/2013 12:06:14 AST
6684	Charge: Products	GO-Demo1	-85.00 DKK	0.00 DKK	Package periodical payment: CP - Go - 2 Lines + 10 Numbers	30/08/2013 12:06:14 AST
6683	Payment: Paypal AccA	Booth 01	15.00 USD	0.00 USD	activation	15/08/2013 13:14:35 AST
6682	Payment: Paypal AccA	Booth 04	10.00 DKK	0.00 DKK	activation	15/08/2013 13:14:27 AST
6681	Payment: Paypal AccA	Booth 02	20.00 DKK	0.00 DKK	activation	15/08/2013 13:14:14 AST
	Charge: Calls	Customer J	-0.35 USD	0.00 USD		12/08/2013 21:00:00 AST
	Charge: Calls	Vendor B	0.92 DKK	0.00 DKK		12/08/2013 21:00:00 AST
	Charge: Calls	Customer J	-0.07 USD	0.00 USD		12/08/2013 19:00:00 AST
	Charge: Calls	Vendor C	0.04 USD	0.00 USD		12/08/2013 19:00:00 AST
	Charge: Calls	Vendor B	1.66 DKK	0.00 DKK		12/08/2013 18:00:00 AST
	Charge: Calls	Customer J	-0.64 USD	0.00 USD		12/08/2013 18:00:00 AST
	Charge: Calls	Vendor B	3.26 DKK	0.00 DKK		12/08/2013 17:00:00 AST
	Charge: Calls	Vendor D	0.00 USD	0.00 USD		12/08/2013 17:00:00 AST
	Charge: Calls	Customer J	-1.27 USD	0.00 USD		12/08/2013 17:00:00 AST
	Charge: Calls	Vendor C	0.19 USD	0.00 USD		12/08/2013 16:00:00 AST
	Charge: Calls	Customer I	-0.41 USD	0.00 USD		12/08/2013 16:00:00 AST
	Charge: Calls	Vendor D	0.14 USD	0.00 USD		12/08/2013 16:00:00 AST
	Charge: Calls	Vendor B	0.18 DKK	0.00 DKK		12/08/2013 16:00:00 AST
	Charge: Calls	Customer J	-0.07 USD	0.00 USD		12/08/2013 16:00:00 AST

Payments list columns have the following meaning:

Column Name	Description
ID	A payment thorough ID number
Payment Account	Displays respective payment account, related to a performed payment or respective charge type, such as: <i>calls</i> , <i>products</i> , <i>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 Cost	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

The screenshot shows a 'New Transaction' window with the following fields and values:

- Client: [Empty]
- Amount: 0
- Currency: USD
- Taxes: No taxes
- Type: Payment
- Payment Account: General
- Comments: [Empty]
- Transaction Date: 2015-12-22 13:47:34+0000
- Status: Approved

Buttons: OK, Cancel, Apply

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

The screenshot shows the 'New Transaction' window with the 'Taxes' dropdown menu open. The dropdown options are:

- No taxes
- Include taxes
- Exclude taxes

A red arrow points to the 'Include taxes' option. The 'Amount' field is highlighted with a red box. The 'Transaction Date' is 2015-09-10 12:30:14+0000. Buttons: OK, Cancel, Apply

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 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 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 a 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

New Transaction

Client:

Amount: Type:


Payment Account:

Comments:

Transaction Date: Status:

"Import Transactions" and "Export List" Buttons

While using the "*Import Transactions*" option, you can perform 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 in two steps:

1. **Selecting File and Specifying Additional Parameters.** Follow this step to set some configurations in regard to import process.
2. **Recognizing the file.** System will recognize the file and you can make changes to the recognition of data (for instance, switch columns) and press "*Process>>*" again.

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 Search Form](#)
- [Forming The Analysis Report](#)
- [Knowledge Base Articles](#)

Balance Report Search Form

This section represents a Balance Report analysis tool. It displays full history of client's charges and payments for selected period. Main window is displayed as a search form:

Screenshot: Balance Report section main window

The screenshot shows the 'Balance Report' search form. It features a search bar with the placeholder text 'Please select parameters for report' and a 'Query' button. The form includes several filters: 'Period' (set to 'this month'), 'Client' (empty), 'Mode' (set to 'Accountant'), 'Currency' (set to 'USD'), 'Output' (set to 'Web'), and 'Group By #1' and 'Group By #2' (both empty). The interface also shows a 'Balance Report' title bar and a 'Query' button.

Forming The Analysis Report

To form the analysis report do the following: specify period, client (leave empty field for all) and report mode: *Accountant* – builds report with data that includes received payments and issued invoices (this effectively builds *Accountant* balance, useful data for postpaid), or *Live Balance* – builds report by received payments and call processing charges (this effectively builds *Current* balance, useful data for prepaid). Press “Query” button when done. The analysis report would look like on screenshot below:

Screenshot: Forming the analysis report

Client	Payment Account	Document	Date	Start Balance	Debit	Credit	End Balance
				0.00 USD	7 171.26 USD	4 874.78 USD	2 296.48 USD
Rohde DKK	Accounts Receivable	Invoice INV-2013-184 DKK	01/07/2013 05:20:03 AST	0.00 USD	59.41 USD 222.77 DKK		59.41 USD
Customer A DKK	Paypal AccA / Reseller A	Payment 4539 Paid with paypal:323-54	01/07/2013 10:37:49 AST	59.41 USD		100.00 USD 375.00 DKK	-40.59 USD
Customer K DKK	Accounts Receivable	Invoice INV-2013-185 DKK	01/07/2013 13:08:30 AST	-40.59 USD	494.69 USD 1 855.08 DKK		454.09 USD
Customer B	Accounts Receivable	Invoice INV-2013-186	01/07/2013 13:11:34 AST	454.09 USD	105.32 USD		559.41 USD
Customer M DKK	Accounts Receivable	Invoice INV-2013-187 DKK	01/07/2013 13:12:41 AST	559.41 USD	102.67 USD 385.00 DKK		662.08 USD
Customer I	Accounts Receivable	Invoice INV-2013-188	01/07/2013 13:44:54 AST	662.08 USD	2 398.26 USD		3 060.34 USD
Customer L	Accounts Receivable	Invoice INV-2013-189	01/07/2013 13:45:50 AST	3 060.34 USD	2 158.26 USD		5 218.60 USD
Customer F DKK	Accounts Receivable	Invoice INV-2013-190 DKK	01/07/2013 13:46:52 AST	5 218.60 USD	113.49 USD 425.59 DKK		5 332.09 USD
Customer D DKK	Accounts Receivable	Invoice INV-2013-191 DKK	01/07/2013 13:47:30 AST	5 332.09 USD	102.67 USD 385.00 DKK		5 434.76 USD
Customer K DKK	Accounts Receivable	Invoice INV-2013-192 DKK	01/07/2013 14:05:42 AST	5 434.76 USD	205.84 USD 771.91 DKK		5 640.60 USD
Customer A DKK	Accounts Receivable	Invoice INV-2013-193 DKK	01/07/2013 15:37:04 AST	5 640.60 USD	22.67 USD 85.00 DKK		5 663.27 USD
Customer H DKK	Accounts Receivable	Invoice INV-2013-194 DKK	01/07/2013 15:39:32 AST	5 663.27 USD	215.33 USD 807.48 DKK		5 878.59 USD
Customer H DKK	ExaCaller	Payment 5400 DKK ACZ354-4234	16/07/2013 16:08:19 AST	5 878.59 USD		3 076.53 USD 11 537.00 DKK	2 802.06 USD
Customer L	Accounts Receivable	Invoice INV-2013-199	18/07/2013 13:37:33 AST	2 802.06 USD	1 192.67 USD		3 994.73 USD
Customer I	Authorize.Net ACC B / Reseller B	Payment 5684 Check Payment	21/07/2013 13:54:53 AST	3 994.73 USD		1 503.05 USD	2 491.68 USD

Report fields description:

Column Name	Description
-------------	-------------

Client	Name of client/reseller/calling card/call shop for that current operation is assigned to
Payment Account	Displays respective payment account, where performed payment was assigned
Document	Which document an operation corresponds to (invoice 100, for example)
Date	Operation date
Start Balance	Start client's balance prior to respective operation
Debit	Operation sum, that has positive income (incoming payment / invoice etc)
Credit	Operation sum, that has negative income (outgoing payment / invoice etc)
End Balance	Final client's balance after respective operation



Tip: To get information sorted by multiple clients, please select *Group by: Client* setting. You can do the same for *Payment Accounts* as well.

Knowledge Base Articles

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

Resellers

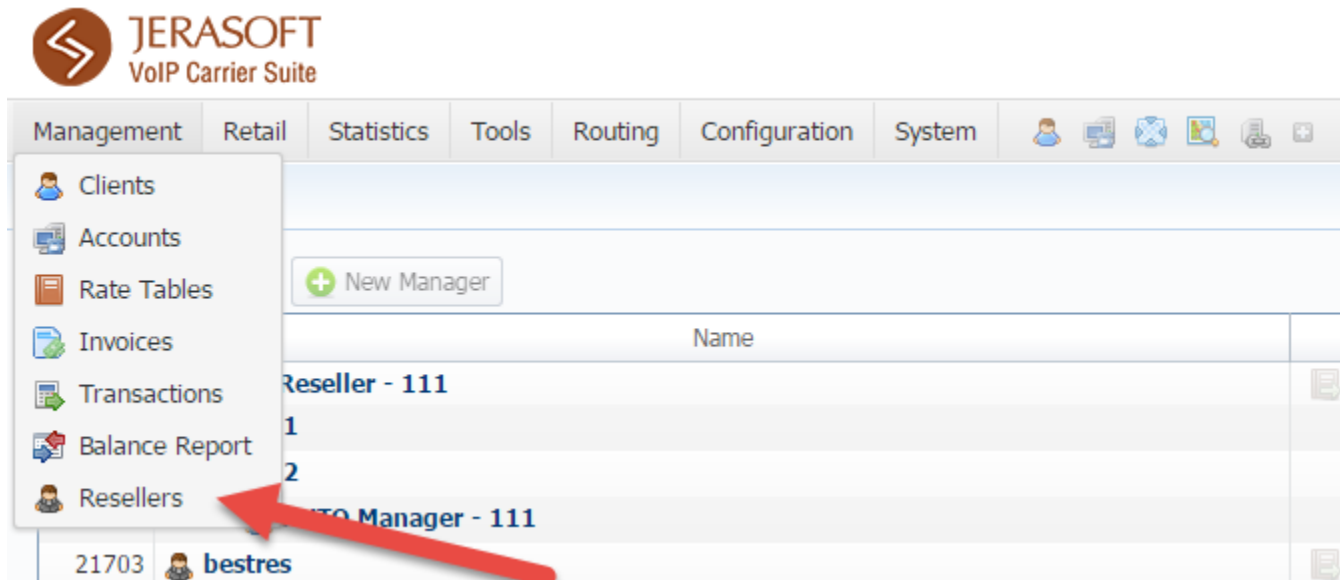
On this page

- [Resellers List](#)
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- [Configuration Syntax](#)
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Resellers List

This section covers *Reseller/Manager* features and functions that are available and allows you to specify the information about your company or affiliate.

Screenshot: Resellers section



Main window of this section contains the full list of *Resellers* and provides the possibility to create a *New Company/Reseller* or *Manager*.

Screenshot: Resellers section main window

The screenshot shows the Resellers section main window. The table has columns for ID, Name, Available Balance, Clients, Cards, and Call Shops. The table contains 8 rows of data. The 'Available Balance' column shows 'No Limit USD' for most entries, and '10 000.00 USD' for Reseller_A. The 'Clients' column shows the number of clients for each reseller, and the 'Cards' column shows the number of cards. The 'Call Shops' column shows the number of call shops for each reseller.

ID	Name	Available Balance	Clients	Cards	Call Shops
3	Company Name	No Limit USD	8	20	1
110	Reseller	No Limit USD	7	0	0
14	Reseller_A	10 000.00 USD	8	50	3
92	Man_2	No Limit USD	0	0	0
15	Reseller_123	No Limit USD	0	0	0
16	Reseller_B	No Limit USD	1	0	0
19	Man_1	No Limit USD	0	0	0
20	Man_2	No Limit USD	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

New Reseller

SYSTEM INFORMATION

Name:

Parent:

Currency:

Status:

Client Template:

Tax Profile:

VoIP Gateways:

TERMINATOR SETTINGS

TERM Rates:

TERM Capacity:

FRAUD PROTECTION

Notification frequency:

Skip digits:

[MAIL TEMPLATE: INVOICE](#)

[MAIL TEMPLATE: PAYMENT REMINDER NOTIFICATION](#)

[MAIL TEMPLATE: LOW BALANCE NOTIFICATION](#)

[MAIL TEMPLATE: RATES NOTIFICATOR](#)

[MAIL TEMPLATE: FACTORS WATCHER](#)

ORIGINATOR SETTINGS

Postpaid: USD

ORIG Rates:

ORIG Capacity:

INVOICING INFORMATION

Date:

Template:

No. Tpl:

Last No:

EMAIL RATES IMPORT SETTINGS

Host:

Port:

CONTACT INFORMATION

E-mail:

Postal Address:

Tax ID:


Reg ID:

Bank Account:

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"> • Tax Profile Select a tax profile, that will be used for this Reseller
	<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 	<p>Here you can set specific paid mode for a client.</p> <p>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.</p>
	<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 	<p>Allows you to select how system sets invoicing date:</p> <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	<p>Enables/disables administrator notification in case of multiple simultaneous calls made to the same number from the current Reseller.</p> <div style="border: 1px solid yellow; padding: 5px; margin: 5px 0;">  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	Settings used for automatic import of updated rates from emails	

Import Settings	<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
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	



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 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 4 different mail templates you can configure for your company. They are:

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

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

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['balance_avail'])</code>	A client live balance + credit
<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['company_status'])</code>	The status of a client company
<code>\$(client['tax_id'])</code>	Customers tax ID of a clients' company
<code>\$(client['reg_id'])</code>	The registration ID of a clients' company

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['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['company_status'])</code>	The status 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
<code>\$(company['num_companys'])</code>	Number of companies/resellers
<code>\$(company['num_cc'])</code>	Number of calling cards of a current company/reseller
<code>\$(company['num_callshops'])</code>	Number of callshops of a current company/reseller

Configuration Syntax for Mail Template: Invoice

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['client_type']}</code>	Invoiced client type
<code>\${invoice['client_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['currency']}</code>	A client currency
<code>\${client ['alert_threshold']}</code>	Notification for a client of reached balance limit
<code>\${client ['alert_atreshold']}</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

Knowledge Base Articles

- [US Taxation](#)
- [What is resellers billing mode?](#)
- [How to set up a functional capacity?](#)
- [What is real time fraud protection functionality and how to set it up?](#)

Client Packages

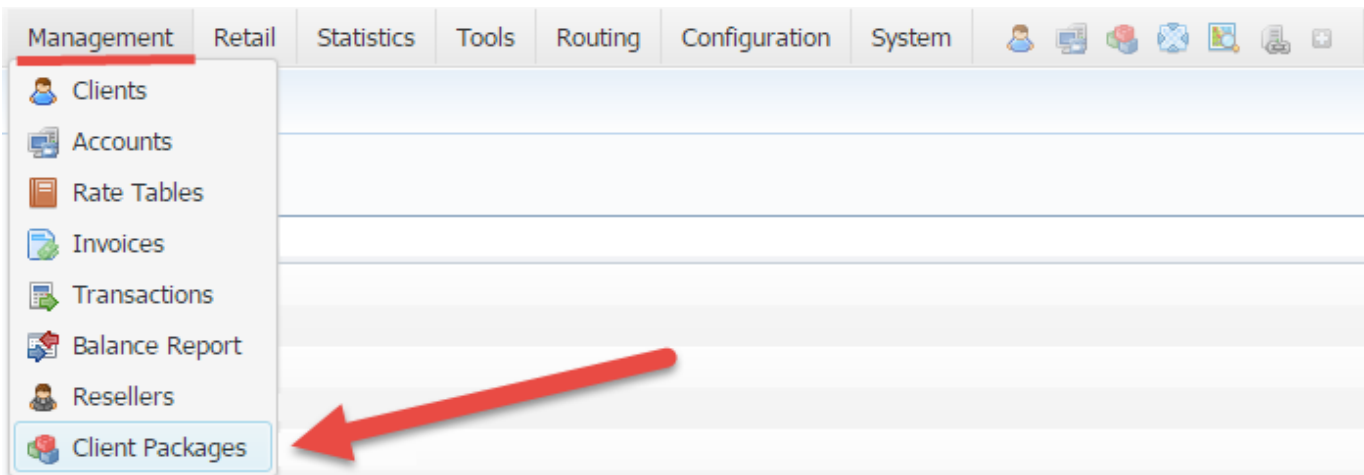
On this page

- [Client Packages Main Window](#)
- ["Assign Package" Button](#)
- ["Add Package" Button](#)

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		
5555	—	10\$ included taxes	* — 09:40	07/09/2015 11:05:39 +0300	07/10/2015 11:00:00 +0300		
Customer B	—	Ireland 1 Number+1 Line		07/09/2015 09:54:15 +0300	30/09/2015 23:59:59 +0300		
RESELLER A	—	10\$ included taxes	* — 12:00	04/09/2015 12:00:01 +0300	10/10/2015 13:00:00 +0300		
Customer L	—	Ireland 1 Number+1 Line		04/09/2015 11:49:37 +0300	30/09/2015 23:59:59 +0300		
Customer L	—	Ireland 1 Number+1 Line		04/09/2015 11:49:02 +0300	01/10/2015 02:59:59 +0300		
Customer L	—	Ireland 1 Number+1 Line		04/09/2015 11:46:54 +0300	01/10/2015 02:59:59 +0300		
RESELLER A	—	10\$ included taxes	* — 09:40	04/09/2015 11:45:03 +0300	04/10/2015 11:00:00 +0300		
testCl1	—	pack#1		03/09/2015 14:00:01 +0300	10/09/2015 14:00:00 +0300		
testCl1	—	pack#1		03/09/2015 14:00:01 +0300	10/09/2015 14:00:00 +0300		
Customer A	—	10\$ included taxes	* — 09:00	03/09/2015 14:00:01 +0300	30/09/2015 23:59:59 +0300		
Customer J	—	10\$ included taxes	* — 09:00	03/09/2015 14:00:01 +0300	30/09/2015 23:59:59 +0300		
Customer A	—	10\$ included taxes	* — 09:00	03/09/2015 14:00:01 +0300	30/09/2015 23:59:59 +0300		
testCl2	—	pack#2		03/09/2015 14:00:01 +0300	10/09/2015 14:00:00 +0300		

Column	Description
Client Name	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 –Time and Money Left	Shows, if respective package has some volume limits and time or money left

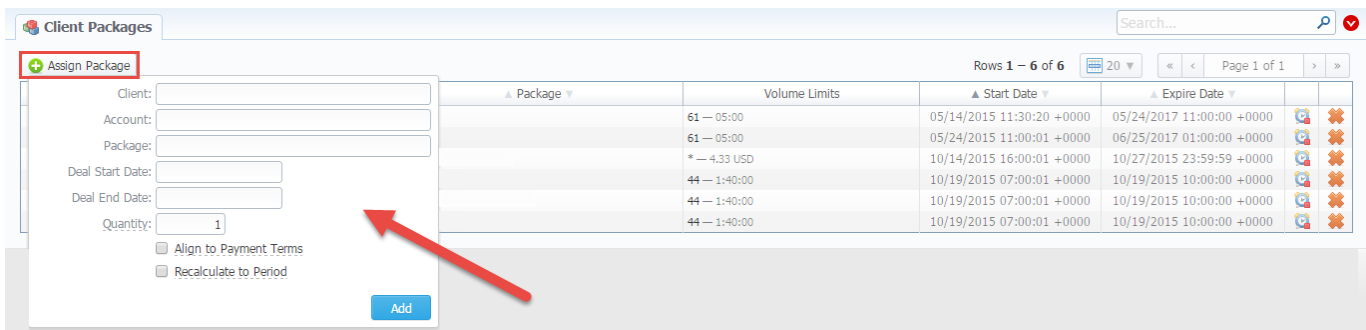
Start Date	A date, when package was activated
Expire Date	A date, when package will be stopped, if there will be no prolongations (due to client's balance, for example)

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 to insure that package will not be renewed, even if all requirements are met
	This icon allows to revert changes triggered by previous icon, until <i>Packages Manager</i> starts
	Click this icon to delete the package

"Assign Package" Button

Click "Assign Package" button and in the pop-up window fill the following form, then click «Add» button. You can assign any number of packages. They will be activated when *Package Manager* service runs, and if customer has enough balance for activation+subscription fees.

Screenshot: Assign Client Package form

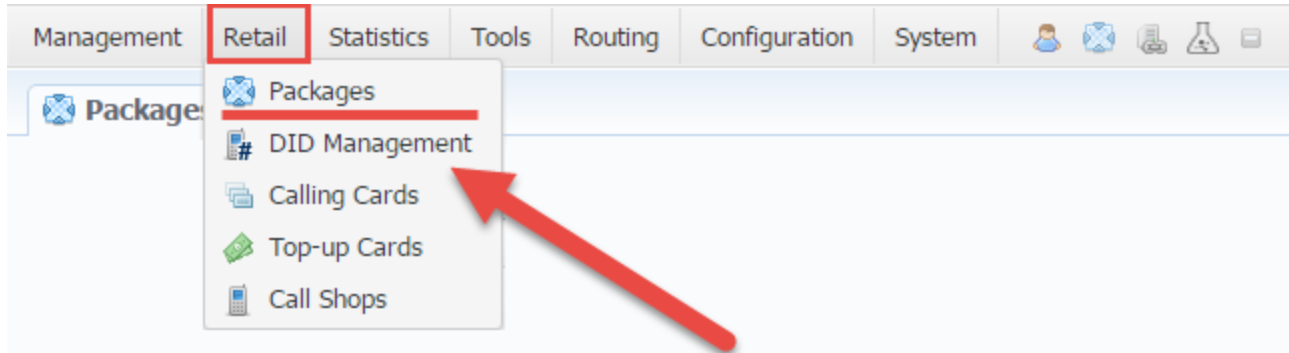


Column	Description
Client Name	Name of Client to whom package is assigned
Account	Name of Account to whom package is assigned Shows for whom package is assigned
Package	Name of assigned package
Deal Start Date	Package's limits and discounts are only effective after specified date
Deal End Date	Package's limits and discounts are disabled after specified date
Quantity	Number of packages to be assigned.
Check box "Align to Payment Terms"	If enable, it takes client's assigned payment terms as date of package first reactivation
Check box "Recalculate to Period"	If enable, it recounts charge to next reactivation date. 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 package will be reactivated on 1st of the next month.

"Add Package" Button

You can add 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



Click "Add Package" button and in the pop-up window select a package from list and assign it by clicking «Add» button.



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*.

Retail Details

This document will describe everything that concerns the retail functions of JeraSoft VoIP Carrier Suite. Please note, that for all this functions to be available to you, your JeraSoft VCS installation should include the Retail Module.

In addition to vast wholesale functionality, JeraSoft VCS offers rich retail functions, which are described in below sections of this document. Each section describes an important aspect of retail-based VoIP business, and among features you may find Calling Cards, Payment Gateways, Subscription Packages, Top-Up Cards and Call Shops. All of these features are grouped within *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](#)

Calling Cards

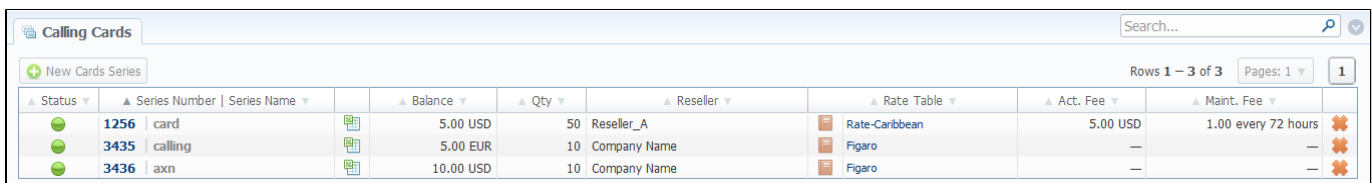
On this page

- [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 customer can perform calls, login to his control panel to browse statistics and other relevant information.

Screenshot: Calling Cards section main window

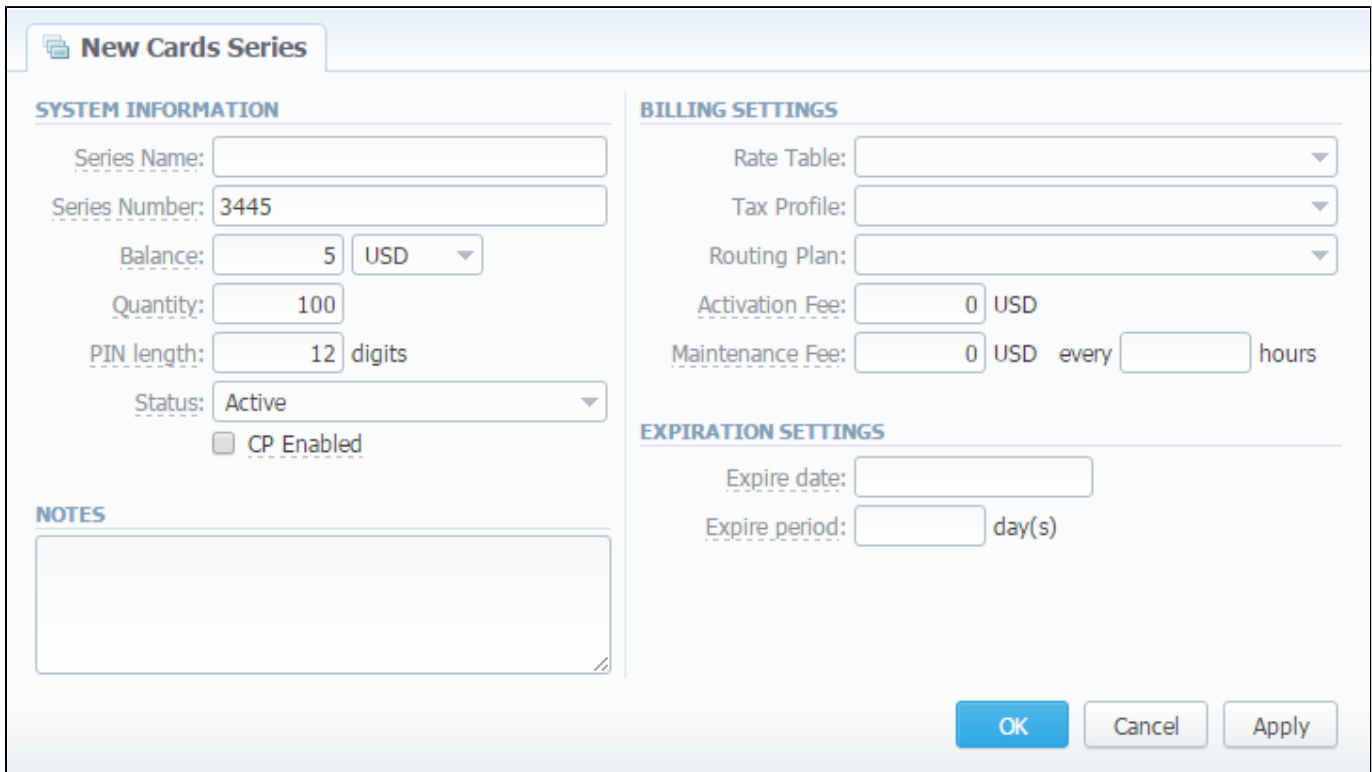


Status	Series Number	Series Name	Balance	Qty	Reseller	Rate Table	Act. Fee	Maint. Fee
●	1256	card	5.00 USD	50	Reseller_A	Rate-Caribbean	5.00 USD	1.00 every 72 hours
●	3435	calling	5.00 EUR	10	Company Name	Figaro	—	—
●	3436	axn	10.00 USD	10	Company Name	Figaro	—	—

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



SYSTEM INFORMATION

Series Name:

Series Number:

Balance:

Quantity:

PIN length: digits

Status:

CP Enabled

BILLING SETTINGS

Rate Table:

Tax Profile:

Routing Plan:

Activation Fee: USD

Maintenance Fee: USD every hours

EXPIRATION SETTINGS

Expire date:

Expire period: day(s)

NOTES

Please fill out all required fields:

Field Name	Description
Series Name	A name that describes current card series
Series Number	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 «OK» button is pressed, calling cards series will be created, and appear in the list of section main window. To open series properties, click on series name. In a properties window 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.

Also, here you can perform a card search with search form, and export whole card series to a CSV file by pressing «*Download CSV*» button.

If you go to *Parameters* tab, you will be able to change some of the parameters you've entered when creating series.



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 the 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](#)

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. Main window of this section is displayed on screenshot:

Screenshot: Top-Up Cards section main window

Serial Number	Amount	PIN Code	Reseller	Activated	Created on
124-001054756	5.00 USD	8669 8569 3479	Reseller_A	Client(Client's Panel) 05/15/2014	05/15/2014 13:22:38 +0000
124-001054755	5.00 USD	9502 5038 0479	Reseller_A	—	05/15/2014 13:22:38 +0000
124-001054754	5.00 USD	5154 3196 3398	Reseller_A	—	05/15/2014 13:22:38 +0000
124-001054753	5.00 USD	6954 3553 4036	Reseller_A	—	05/15/2014 13:22:38 +0000
124-001054752	5.00 USD	7696 3041 3034	Reseller_A	—	05/15/2014 13:22:38 +0000
123-008845612	10.00 USD	9818 8067 6010	Reseller_A	—	05/15/2014 10:58:23 +0000

Creating New Series

To create new series, press «Generate Top-Up Cards» button and in the pop-up window (Screenshot below) fill the following fields:

Screenshot: Generating Top-up Cards window

Generate Top-Up Cards

Amount:

Quantity:

Series:

PIN Length: digits

Reseller:




Expiry Date:

Field Name	Description
Amount	Cards balance value within series
Quantity	Quantity of cards within series
Series	A code identifier of card series. This code will prepend a serial number
PIN Length	Specify a desired PIN-code length for current calling card series (it can not be less than 8 digits)

Reseller	Defines what reseller owns current calling card series
Expiry date	Current calling cards series will be expired on specified date

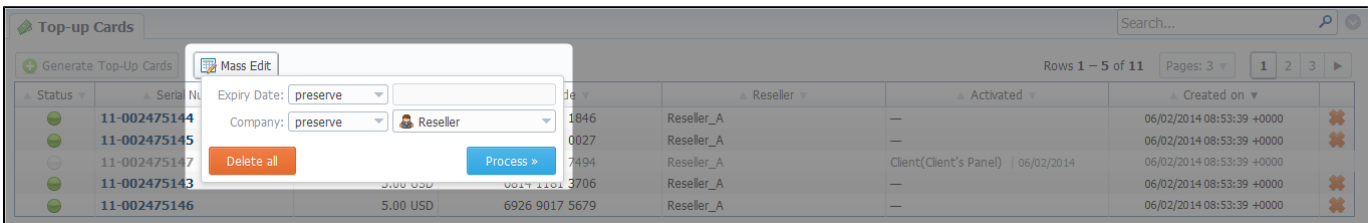
After top-up card series is created, your customers will be able to enter respective PINs in their control panel in *Payment Gateways* section, to recharge their balance (respective rights for users are required).

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

Also you may delete cards or change some settings for already created top-up cards using **"Mass Edit"** button (Screenshot below). 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 press *"Process"* button and all changes will be applied. *"Delete all"* button will wipe out all existing top-up cards.

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



Call Shops

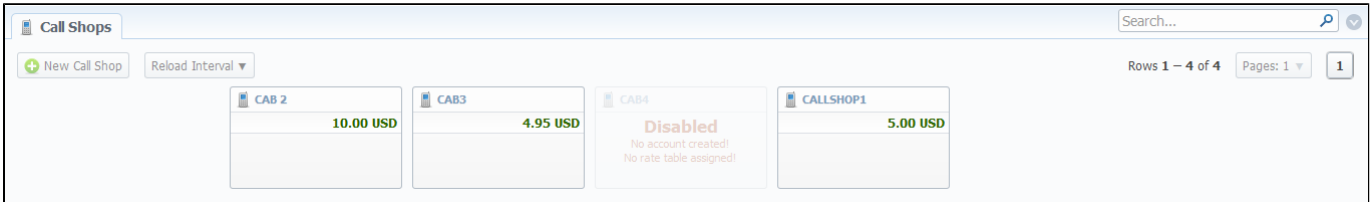
On this page

- [Call Shops List](#)
- [Creating New Call Shop](#)

Call Shops List

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

Screenshot: Call Shops section main window




Creating New Call Shop

To create new call shop, press «New Call Shop» button and in the pop-up window (Screenshot below) fill the following details:

Screenshot: Creating new call shop

The screenshot shows a 'New Client' form. It is divided into two main sections: 'SYSTEM INFORMATION' and 'ORIGINATOR SETTINGS'. The 'SYSTEM INFORMATION' section includes fields for Name, Reseller (set to 'Reseller A'), Currency (set to 'USD'), Timezone (set to 'default (Asia/Riyadh)'), and Status (set to 'Active'). The 'ORIGINATOR SETTINGS' section includes 'Allowed Credit' (set to '0.00 USD'), 'Rate Table', and 'Tax Profile'. Below these is the 'DYNAMIC ROUTING' section with 'Routing Plan' and 'Capacity' (with a unit of 'channels'). At the bottom right, there are 'OK' and 'Cancel' buttons.

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
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 here, if you wish to use dynamic routing for this call shop
Capacity	You can limit origination capacity for this callshop in this field

After all information is entered, press «OK» and call shop will appear on the list. Then you need to click  icon and go to *Accounts* tab, where you need to fill call shop's account in same fashion as you did for your generic clients. After that is done, call shop is ready to be used.

Also you may set an interval for *Call Shops list* reloading, using the respective button which is placed in main window of this section.



Please note that **calculator** should be in **realtime mode** for correct *Call Shops* work.

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 may create a package that resembles a 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

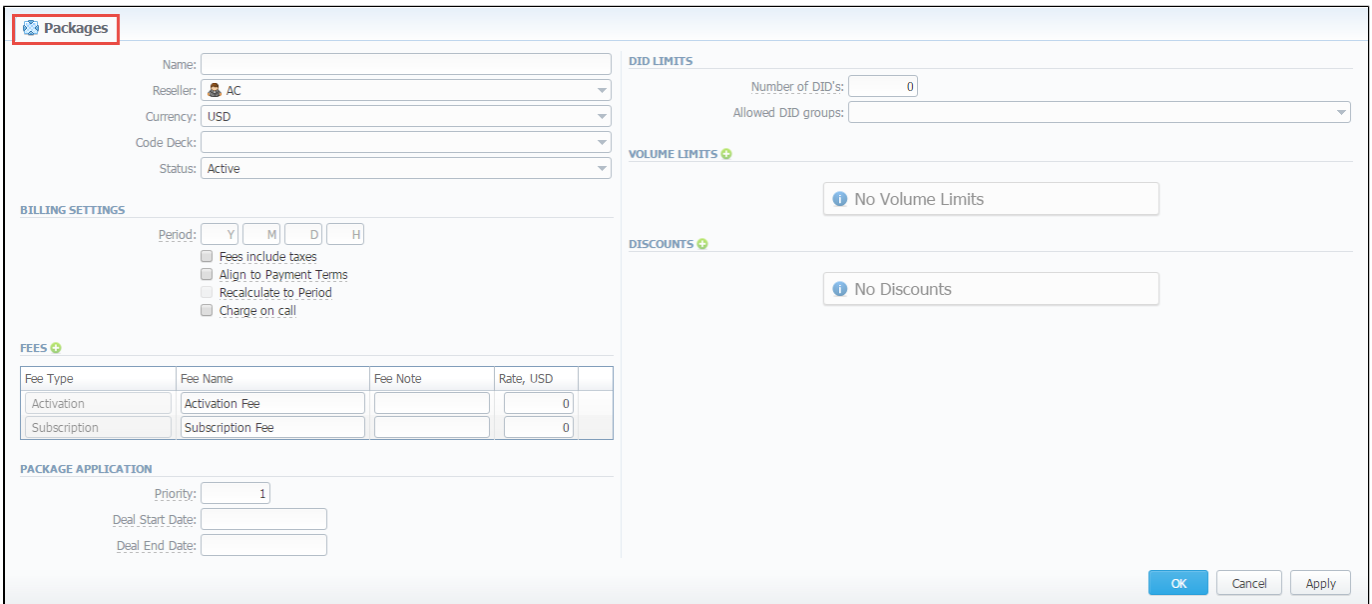


ID	Status	Name	Activation Fee	Subscription Fee	Period	Reseller
18	●	Australia Extra Line	0.00 USD	25.00 USD	1 month(s)	Reseller B
17	●	Australia Extra Number	0.00 USD	7.50 USD	1 month(s)	Reseller B
20	●	Bahrain Extra Line	0.00 USD	25.00 USD	1 month(s)	Reseller B
19	●	Bahrain Extra Number	0.00 USD	15.00 USD	1 month(s)	Reseller B
24	●	Canada Extra Line	0.00 USD	25.00 USD	1 month(s)	Reseller B
23	●	Canada Extra Number	0.00 USD	2.50 USD	1 month(s)	Reseller A
14	●	CP - Go - Extra 10 Numbers	0.00 DKK	25.00 DKK	1 month(s)	Reseller A
2	●	CP - Go - Extra Number	0.00 DKK	2.50 DKK	1 month(s)	Reseller A
11	●	CP - HostedTrunk - 10 Lines	0.00 DKK	700.00 DKK	1 month(s)	Reseller A
9	●	CP - HostedTrunk - 1 Line	0.00 DKK	100.00 DKK	1 month(s)	Reseller A

Adding New Package

You can add new package by clicking the «*New Package*» button. New window that opens contains the following information:

Screenshot: Package properties



Package Properties

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
Activation	Activation Fee		0
Subscription	Subscription Fee		0

PACKAGE APPLICATION

Priority:

Deal Start Date:

Deal End Date:


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 into 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 even recalculation of days up to Payment Terms period, if 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 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 compares 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, 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		
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%; margin-top: 10px;"> <tr> <td style="width: 15%;">Number of DID's</td> <td>How many DID's can be assigned at the same time</td> </tr> </table>	Number of DID's	How many DID's can be assigned at the same time
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 into package	
	<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 *, i.e. code 380* in package's code deck.
	<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
	<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 period is specified and both check boxes "Align to payment terms" and "Recalculated to Period" are enabled.

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](#)
- [Editing DID Numbers](#)
- [Creating DID Number](#)
- [DIDs Importing process](#)
- [Operators List Section](#)
- ["New Operator" Button](#)
- [DIDs History Section](#)

DID Management Section Main Window

This section allows creation of DID numbers, which may be later assigned to one of Packages and finally provided to customer under Package terms (Screenshot).

Screenshot: DID management section main window

ID	Status	DID	DID Groups	Operator	Client	Reseller
6	In Stock	12314343242	DID-1	OPERATOR_3	—	Company Name
2	Active	1232455666	DID-2	OPERATOR_2	client-DID account_3	Reseller_A
8	Active	123455532	DID-1, DID-2	OPERATOR_3	client-DID DID-account	Company Name
7	In Stock	12345555	DID-1	OPERATOR_1	—	Reseller_A
9	Active	12345678910	DID-1, DID-2	OPERATOR_3	—	Company Name
115	In Stock	124342442424	DID-1, DID-2	OPERATOR_2	—	Reseller_A
12	In Stock	323438394342	DID-1	OPERATOR_3	Client_ordinator account_2	Company Name
11	Active	3239123231238	DID-1	OPERATOR_3	client-DID account_3	Company Name
4	Active	3454262446	DID-1	OPERATOR_1	—	Reseller_A
1	In Stock	3567123944	DID-1	OPERATOR_1	—	Reseller_A
14	Reserved	38065329231	DID-1, DID-2	OPERATOR_1	—	Company Name
10	Active	444444444	DID-1	OPERATOR_3	client-DID account_3	Reseller_A
13	In Stock	546575243234	DID-1, DID-2	OPERATOR_3	—	Company Name
5	Active	5564443424224	DID-1	OPERATOR_4	—	Reseller_B
3	Reserved	5567756754	DID-2	OPERATOR_3	—	Reseller_A

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
DID's Groups	Shows group, which current DID belongs to
Operator	Current DID's operator, a owner of current DID number
Client	Shows client and account, which current DID belongs to
Reseller	Current DID's reseller



Note!

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

Editing DID Numbers

By pressing on current DID number, the new window will pop up. Here you can edit all information about current DID, including it's status, group, reseller, etc. (Screenshot)

Screenshot: "Edit DID" window

Creating DID Number

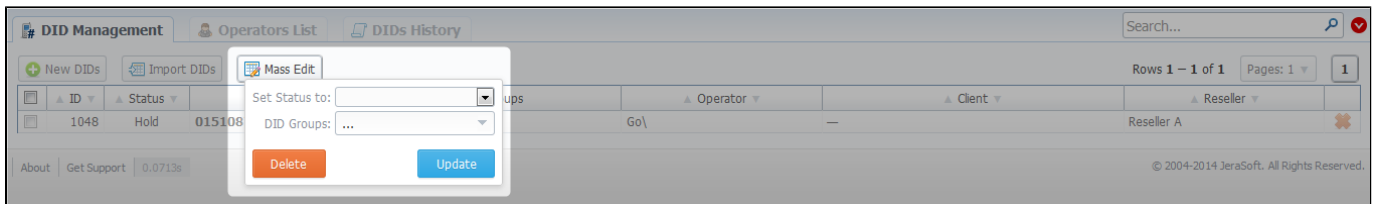
The whole process of creating DID number can be described in few steps:

1. Go to *Configuration – Groups* and create one or more *DID Groups* by pressing "New Group" button in "DID Groups" section tab;
2. Go back to *Retail – DID Management* and create one or more Operators (DID providers) by pressing "New Operator" button in "Operators List" section tab;
3. In "DID Management" section tab press "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 "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 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 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.

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

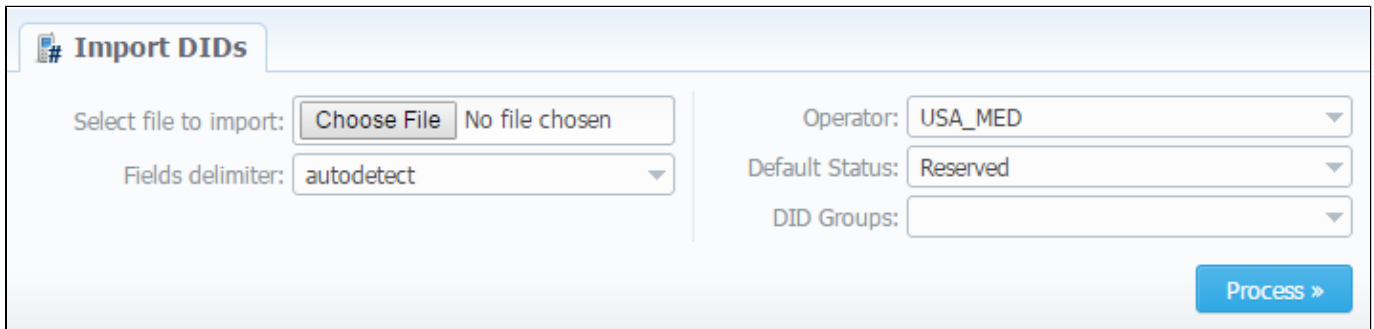
Screenshot: DID management "Mass Edit" window



DIDs Importing process

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

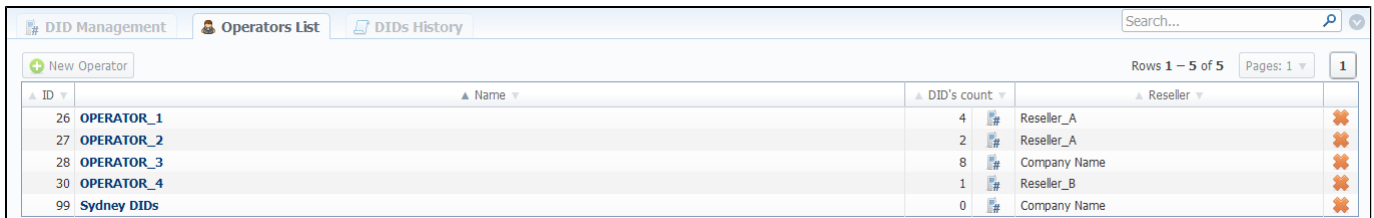
Screenshot: Importing DIDs



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 (Screenshot).

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

"New Operator" Button

Press "New Operator" button and in the pop-up window specify an operator name and select a reseller for this operator then press "OK" button.

DIDs History Section

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

Screenshot: DIDs History window

ID	Status	DID	Client / Account	Operator	Reseller	Package	Operation	Date
614	Active	12345678910	—	OPERATOR_3	Company Name	FREE MINUTES	UPDATE	06/18/2014 07:11:40 +0000
613	Active	3239123231238	client-DID account_3	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
610	Active	1232455666	client-DID account_3	OPERATOR_2	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
612	Active	444444444	client-DID account_3	OPERATOR_3	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
611	Active	123455532	client-DID DID-account	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
606	Hold	3239123231238	client-DID account_3	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
607	Hold	444444444	client-DID account_3	OPERATOR_3	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
609	Hold	1232455666	client-DID account_3	OPERATOR_2	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
608	Hold	123455532	client-DID DID-account	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
605	Active	12345678910	Client1 account_1	OPERATOR_3	Company Name	FREE MINUTES	UPDATE	06/17/2014 22:01:08 +0000
604	Hold	12345678910	Client1 account_1	OPERATOR_3	Company Name	FREE MINUTES	UPDATE	06/17/2014 22:01:08 +0000
601	Active	123455532	client-DID DID-account	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
602	Active	444444444	client-DID account_3	OPERATOR_3	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
603	Active	3239123231238	client-DID account_3	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
600	Active	1232455666	client-DID account_3	OPERATOR_2	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
599	Hold	1232455666	client-DID account_3	OPERATOR_2	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
596	Hold	3239123231238	client-DID account_3	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
597	Hold	444444444	client-DID account_3	OPERATOR_3	Reseller_A	DID	UPDATE	06/17/2014 22:01:08 +0000
598	Hold	123455532	client-DID DID-account	OPERATOR_3	Company Name	DID	UPDATE	06/17/2014 22:01:08 +0000
595	Active	12345678910	Client1 account_1	OPERATOR_3	Company Name	FREE MINUTES	UPDATE	06/17/2014 22:01:08 +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

Statistics

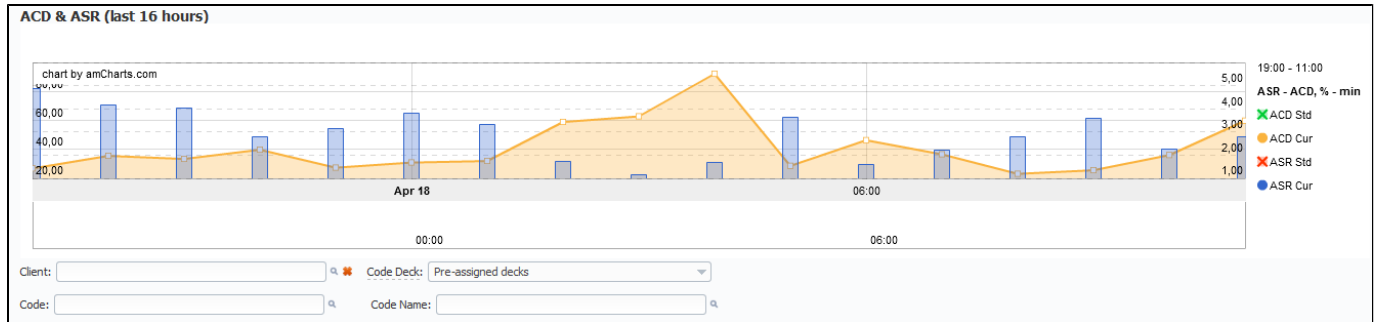
This section of our Guide is dedicated to establish statistics through VCS, for example to monitor customer's activities, to form different reports, etc. For more details please check the related sections:

- [Dashboard](#)
- [Summary Report](#)
- [Orig-Term Report](#)
- [Profit Report](#)
- [LCR Lists](#)
- [CDRs List](#)
- [Graphical Charts in Statistics](#)
- [Mismatches Report](#)
- [Calls Rerating](#)
- [Reports to E-mail](#)
- [Archive Management](#)

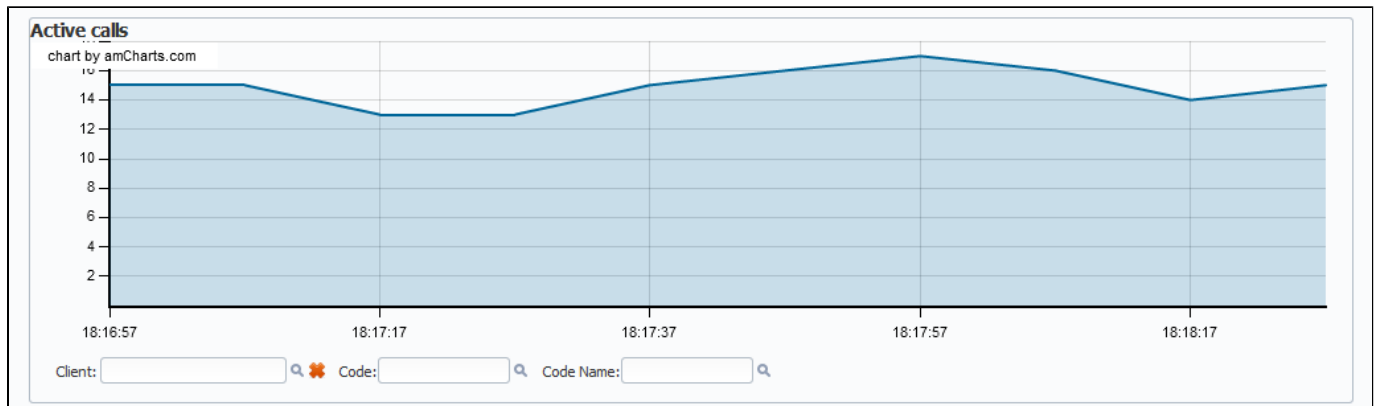
Dashboard

Dashboard section is a little something that will allow you to monitor your customer's activities in real-time, by providing visual graphs on some most crucial information, such as top ten destinations in recent 30 minutes, quality information and active calls graph (Screenshots below).

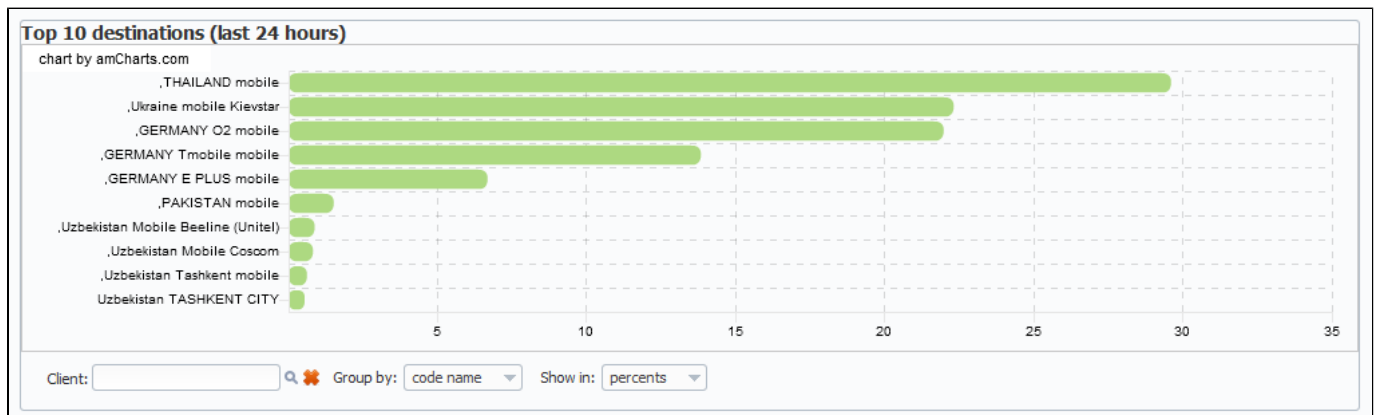
Screenshot: ACD & ASR bar-chart



Screenshot: Active calls graph



Screenshot: Top 10 destinations bar-chart



Please note that all data provided in *Top 10 destination bar-chart* is relevant only for **Termination**.

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 Search Form](#)
- [Creating New Report](#)
- [Grouping The Report Data](#)
- [Knowledge Base Articles](#)

Summary Report Search Form

This section allows you to form summary reports of statistics. Main window of this section is displayed as a search form (Screenshot below):

Screenshot: Summary Report search form

Creating New Report

To create a report you should specify the next parameters:

Section	Field Description	
General Report Settings	Settings needed for generating correct report	
	Period	Specify a period for report
	Client	Define a client for the report
	Account	Enter an account for the report
	Client Type	Select the type of a client for report (<i>Client, Reseller, Calling card or Call shop</i>)
	Code Name	Specify code name of desired destination here
	Code	Specify code of desired destination here
	Under Owner	Specify reseller whose information should be displayed
	Code Deck	Select a code deck that should be used to pull names for <i>Code Name</i> field
	Currency	Specify currency for report
	Output	List output format (HTML-document, Excel csv file)
	"Show subgroups" Checkbox	If enabled, data grouped by separate tables will be shown in case when more than 2 "Group by" options are used

	"Show subtotals" Checkbox	If enabled, subtotals for groups of rows with the same first grouping column will be shown
	Group by	Select grouping option
Advanced Report Settings	Additional parameters for filtration	
	Package	Select package for making filtration of statistics
	Group	Define a group which will be used as a filter criteria
	Type	Select type of a client for executing filtration of report results
	VoIP Gateway	Specify a VoIP host as a filtering criteria
	Res Code	Define res code for results filtration
	Minutes, Total	Enter the range of total calls duration in minutes
	Cost, Total	Enter the range of total call cost
	ASR Cur	Specify the range of "ASR Cur" for calls you would like to display
	Calls Not Zero	Define the range of calls, that have duration equal to or more than 1 second
	Calls Total	Enter the range of total calls
	ACD Cur	Specify the range of "ACD Cur" for calls you would like to display

After selecting all needed parameters press "Query" button and you will get a report like on screenshot below:


Screenshot: Summary Report window

▲ Total Cost ▼	Avg Rate	Time, min		Calls					ASR		ACD, min		▲ PDD ▼	▲ SCD ▼		
		▲ Total ▼	▲ Billed ▼	▲ Total ▼	▲ Not Zero ▼	▲ Success ▼	▲ Busy ▼	▲ No Channel ▼	▲ Std ▼	▲ Cur ▼	▲ Std ▼	▲ Cur ▼				
TYPE: ORIGINATION																
150.5067 DKK	7.5379	29.25	19.97	25	25	25	0	0	100.00 %	100.00 %	1.17	1.17	00:00	00:00		
TYPE: TERMINATION																
0.0000 DKK	0.0000	16.00	0.00	8	8	8	0	0	100.00 %	100.00 %	2.00	2.00	00:00	00:00		

Report data columns are the following:


Column	Description	
Total Cost	Total call cost	
Avg Rate	Average Rate per minute, calculates as total cost / billed time	
Time, min	Call duration in minutes	
	• Total	Total call duration
	• Billed	Billed call duration
Calls	Processed calls quantity	
	• 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


	<ul style="list-style-type: none"> • Busy 	"Busy" calls quantity
	<ul style="list-style-type: none"> • No Channel 	No circuit / channel available
ASR		average successful rate (successful calls percent)
	<ul style="list-style-type: none"> • Std 	Number of calls with "success" status divided by total number of calls minus all calls with "no channel available" status
	<ul style="list-style-type: none"> • Cur 	Number of calls with duration > 0 divided by total number of calls
ACD, min		average call duration
	<ul style="list-style-type: none"> • Std 	Sum of all calls durations divided by number of calls with "success" status
	<ul style="list-style-type: none"> • Cur 	Sum of all calls durations divided by number of calls with duration > 0
PDD		Post dial delay: time in seconds between setup time and return of signaling by termination provider
SCD		Session connect delay: time in seconds between setup and connect time of the call

By clicking on a  icon in top right corner of this section's screen, you will be able to select appropriate data columns in this report (for example, hide some information that you don't need). Same feature is available in *Orig-Term Report*.

Grouping The Report Data

The report data can be grouped by using the "Group by #" fields. For example, if you specify the grouping by *Clients*, then report will be divided by clients, or, if you specify grouping as *Codes Report Name* – report will be created under one row with shortest equal code for multiple code groups. You can select any grouping values in "Group by #" fields, up to 6 at a time. The grouping is additive, so if all 3 fields are defined, the report will be divided by all defined values simultaneously. The "Show subtotals" checkbox will show the subtotals under each defined group (works when 2 or 3 groups are defined).

 **Tip:** This section's reports can only be formed using "whole" periods – i.e. hourly. For example, if you will specify the period from 13:00 to 14:35, the report will be formed using the period from 13:00 to 15:00.

 **Tip:** System displays the real period of statistics below created report.

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 Search Form](#)
- [Creating Orig-Term Report](#)
- [Knowledge Base Articles](#)

Orig-Term Report Search Form

This report allows you to trace all call routes from customer to provider with indication of respective revenues. Main window of this section is displayed as a search form (Screenshot down below).

Screenshot: *Orig-Term Report search form*

The screenshot shows the 'Orig-Term Report' search form. At the top, there's a 'Period' section with dropdowns for 'today', date '2015-01-05', time '00:00:00 - 23:59:59', and time zone 'GMT+2', along with an 'all time' dropdown. Below this are sections for 'Orig Client' and 'Term Client', each with 'Code Name' and 'Account' fields. A 'Code Deck' dropdown is set to 'Pre-assigned decks' and 'Currency' is 'USD'. There are also 'Orig Owner' and 'Term Owner' dropdowns, both set to 'all resellers'. Further down, there are input fields for 'Minutes, Total', 'Calls Not Zero', 'Profit, Total', and 'Calls Total'. At the bottom, there are 'Output' and 'Show subgroups' checkboxes, and six 'Group By' dropdowns. An 'Advanced' button is on the left and a 'Query' button is on the right.

Creating Orig-Term Report

To create a report you need to specify parameters listed below and press "Query" button. Additionally you may specify the origination and termination clients and respective prefix groups and prefixes – if you do, then report will be strictly defined for selected parameters (Screenshot below). Otherwise, the report will be created for all available data.

Section	Field Description	
General Report Settings	Settings needed for generating correct report	
	Period	Specify a period for report
	Orig Client	Define a origination client for report
	Account	Enter an origination account for report
	Code Name	Specify code name of desired destination here
	Code	Specify code of desired destination here
	Card Series	Enter a calling card series for report
	Term Client	Define a termination client for report
	Account	Enter an termination account for report
Code Name	Specify code name of desired destination here	

	Code	Specify code of desired destination here
	Code Deck	Select a code deck that should be used to pull names for <i>Code Name</i> field
	Currency	Specify currency for report
	Output	List output format (HTML-document, Excel csv file)
	"Show subgroups" Checkbox	If enabled, data grouped by separate tables will be shown in case when more than 2 "Group by" options are used
	"Show subtotals" Checkbox	If enabled, subtotals for groups of rows with the same first grouping column will be shown
	Group by	Select grouping option
Advanced Report Settings	Additional parameters for filtration	
	Orig Owner	Define a origination reseller for report
	Group	Select a group which will be used as a filter criteria
	Term Owner	Define a termination reseller for report
	Group	Specify a group which will be used as a filter criteria
	Minutes, Total	Enter the range of total calls duration in minutes
	Profit, Total	Enter the range of the revenue you would like to display
	ASR Cur	Specify the range of "ASR Cur" for calls you would like to display
	Calls Not Zero	Define the range of calls, that have duration equal to or more than 1 second
	Calls Total	Enter the range of total calls
	ACD Cur	Specify the range of "ACD Cur" for calls you would like to display

Screenshot: Orig-Term Report section

Orig			Term			Profit		Total	ASR		ACD, min		Calls *				
Billed Time	Cost	Avg Rate	Billed Time	Cost	Avg Rate	USD	%	Time, min	Std	Cur	Std	Cur	Total	Not Zero	Success	Busy	No Channel
3.65	0.3650	0.1000	3.65	-1.8250	0.5000	-1.4600	-80.00	3.65	100.00 %	100.00 %	1.22	1.22	3	3	3	0	0


View Charts


As an example, if you select grouping by *Orig Client* and *Term Client*, the report will show call routes in this fashion: you'll be able to see the calls and their respective originators and terminators. If you'd add an *Orig Prefix Group* as third grouping option, in addition you'll see origination prefix groups included into report.

Description of basic report fields goes as following:

Column	Description
Orig	Origination info
	<ul style="list-style-type: none"> Billed Time Billed call time
	<ul style="list-style-type: none"> Cost Call cost
	<ul style="list-style-type: none"> Avg. Rate Average call rate
Term	Termination info

	<ul style="list-style-type: none"> • Billed Time 	Billed call time
	<ul style="list-style-type: none"> • Cost 	Call cost
	<ul style="list-style-type: none"> • Avg. Rate 	Average call rate
Profit	The revenue	
	<ul style="list-style-type: none"> • USD 	Revenue in USD (in fact, any system currency can be displayed here. In this example system currency = USD)
	<ul style="list-style-type: none"> • % 	Revenue in percent value
Total Time, min	Total calls time	
ASR	average successful rate (successful calls percentage)	
	<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" status
	<ul style="list-style-type: none"> • Cur 	Number of calls with duration > 0 divided by total number of calls
ACD, min	Average call duration	
	<ul style="list-style-type: none"> • Std 	Sum of all calls durations divided by number of calls with status "success"
	<ul style="list-style-type: none"> • Cur 	Sum of all calls durations divided by number of calls with duration > 0
Calls	Quantity of calls in database	
	<ul style="list-style-type: none"> • Total 	Total calls quantity
	<ul style="list-style-type: none"> • Not Zero 	Quantity of calls, that have duration equal to or more than 1 second
	<ul style="list-style-type: none"> • Success 	Quantity of calls, that have duration equal to or more than 1 second and successful end code
	<ul style="list-style-type: none"> • Busy 	"Busy" calls quantity
	<ul style="list-style-type: none"> • No Channel 	No circuit / channel available

 The **orig-term legs** of the call are matched by following parameters: *conf id, call id, origination/termination call origin, id voip hosts, disconnect time, session time, dst number* (ext 5 digits). And please note, that the **orig-term legs** will be put together even when there is a **one-second difference** between **orig session time** and **term one**.

 Note that Orig-Term Report is built using *dst_number_bill* parameter.

Knowledge Base Articles

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

Profit Report

On this page

- [Profit Report Search Form](#)
- [Creating Profit Report](#)

Profit Report Search Form

Profit Report resembles previously available "logical" type of *Orig-Term Report*. The function of this report is to show profits between reseller parties (companies and managers) and clients of one, who is executing report. For example, if *Manager_1* is executing report, he will be able to see his origination customers sending traffic to *Manager_2*, who owns actual terminator vendors. In this case reseller permissions apply to every query, what guarantees that *Manager_1* will not be able to see any actual name of client belonging to other manager, or other party, which restricted such access.

Main window of this section is displayed as a search form (Screenshot).

Screenshot: *Profit Report search form*

Creating Profit Report

For generating a Profit Report you need to fill in the following fields:

Section	Field Description	
General Report Settings	Settings needed for generating correct report	
	Period	Specify a period for report
	Reseller	Define a reseller for report
	Mode	Select displaying mode of current report: <ul style="list-style-type: none"> • All visible • Hide External Originators • Hide External Clients Note that for resellers default mode is "All visible" and cannot be changed.
	Currency	Select currency for report
	Output	List output format (HTML-document, Excel csv or xls file)
	Code Deck	Select a code deck that should be used to pull names for <i>Code Name</i> field
	Group by	Select grouping option
Advanced Report Settings	Additional parameters for filtration	

Orig Client	Define a origination client for report
Account	Enter an account for report
Reseller	Specify a reseller for report
Code Name	Specify code name of desired destination here
Code	Specify code of desired destination here
Card Series	Enter a calling card series for report
Term Client	Define a termination client for report
Account	Enter an account for report
Code Name	Specify code name of desired destination here
Code	Specify code of desired destination here

After you enter the desired fields and values, press the "Query" button. After the report is created, it will consist of two parts ("Packages" and "Calls") and looks like on screenshot below.

Screenshot: Profit Report section

PACKAGES									
Package Name					Cost				
FREE MINUTES					30.0000 USD				
Profitable					114.0000 USD				
test_did					1.9000 USD				
Total:					145.9000 USD				

CALLS									
▲ Total ▼ Time, min	Income			Expense			▲ Profit ▼		
	▲ Cost ▼	Avg Rate	▲ Billed Time ▼	▲ Cost ▼	Avg Rate	▲ Billed Time ▼	USD	%	
90.32	—	—	—	-26.7900	0.2966	90.32	-26.7900	0.00	

TOTAL									
							Income:	145.90 USD	
							Expense:	-26.79 USD	
							Profit:	119.11 USD	

Description of basic report fields in "Calls" part is following:

Column	Description	
Total Time, min	Total calls time	
Income	Origination info resembling the income	
	• Cost	Call cost
	• Avg. Rate	Average call rate
	• Billed Time	Billed call time
Expense	Termination info resembling the expense	
	• Cost	Call cost

	<ul style="list-style-type: none"> • Avg. Rate 	Average call rate
	<ul style="list-style-type: none"> • Billed Time 	Billed call time
Profit	The revenue	
	<ul style="list-style-type: none"> • USD 	Revenue in USD (in fact, any currency can be displayed here)
	<ul style="list-style-type: none"> • % 	Revenue in percent value



Tip: *Total Profit* counts as sum of *Total Packages Cost* and *Calls Profit*.

LCR Lists

On this page

- [LCR Lists Search Form](#)
- [Forming LCR List](#)

LCR Lists Search Form

This section's purpose is to generate target-lists of actual used traffic for specified period. The main window of this section is displayed as a search form (Screenshot):

Screenshot: LCR Lists section search form

The screenshot shows a web interface for generating LCR Lists. It features a search form with the following fields and options:

- Period:** A date range selector showing 'today', '2014-05-06 00:00:00' to '2014-05-06 23:59:59', and a time zone dropdown set to 'GMT+3'.
- Code Name:** A text input field with a search icon.
- Code:** A text input field with a search icon.
- Order by:** A dropdown menu set to 'time'.
- Under Owner:** A dropdown menu set to 'all resellers'.
- Group:** A dropdown menu.
- Currency:** A dropdown menu set to 'USD'.
- Output:** A dropdown menu set to 'Web'.
- Show vendors names:** A checkbox.
- Show total calls:** A checkbox.
- Code Deck:** A dropdown menu set to 'Pre-assigned decks'.
- Group by:** A dropdown menu set to 'code'.
- Routes limit:** A text input field.
- Query:** A blue button to execute the search.

Forming LCR List

To make a correct query and form the list you need to fill next fields:

Field	Description
Period	Specify a period for report
Code Name	Specify code name of desired destination here
Code	Specify code of desired destination here
Order by	How to order found data, by rate or time
Under Owner	Specify reseller whose information should be displayed
Group	Select client group here
Currency	Specify currency for report
Output	List output format (HTML-document, Excel csv or xls file)
Code Deck	Select a code deck that should be used to pull names for <i>Code Name</i> field
Group by	Select grouping option, by code or code name
Routes limit	Limit displayed number of routes by entering a number here
"Show vendors names" Checkbox	Shows terminator names in report
"Show total calls" Checkbox	Shows total calls amount in report

After you enter the desired values, press the "Query" button. After the report is created, you will get traffic usage list for specified period, filtered per your criteria.



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

Screenshot: Traffic usage list

Code Name	Code	Total Time		#1 Route
USA	1	35.68 min	Time, min: 35.68 Rate, USD: 0.1000 ASR, %: 100.00% ACD, min: 0.99	
UKRAINE	380	18.48 min	Time, min: 18.48 Rate, USD: 0.0100 ASR, %: 100.00% ACD, min: 1.16	
UK	4405	15.5 min	Time, min: 15.5 Rate, USD: 0.0600 ASR, %: 100.00% ACD, min: 0.78	
UKRAINE UMC MOBILE	38050	8.75 min	Time, min: 8.75 Rate, USD: 0.0400 ASR, %: 100.00% ACD, min: 0.97	
UK-Fixed	44	6.57 min	Time, min: 6.57 Rate, USD: 0.8000 ASR, %: 100.00% ACD, min: 0.66	
USA-Fixed	1	3.65 min	Time, min: 3.65 Rate, USD: 0.5000 ASR, %: 100.00% ACD, min: 1.22	
USA-Fixed	12	1.85 min	Time, min: 1.85 Rate, USD: 0.0300 ASR, %: 50.00% ACD, min: 1.85	

CDRs List

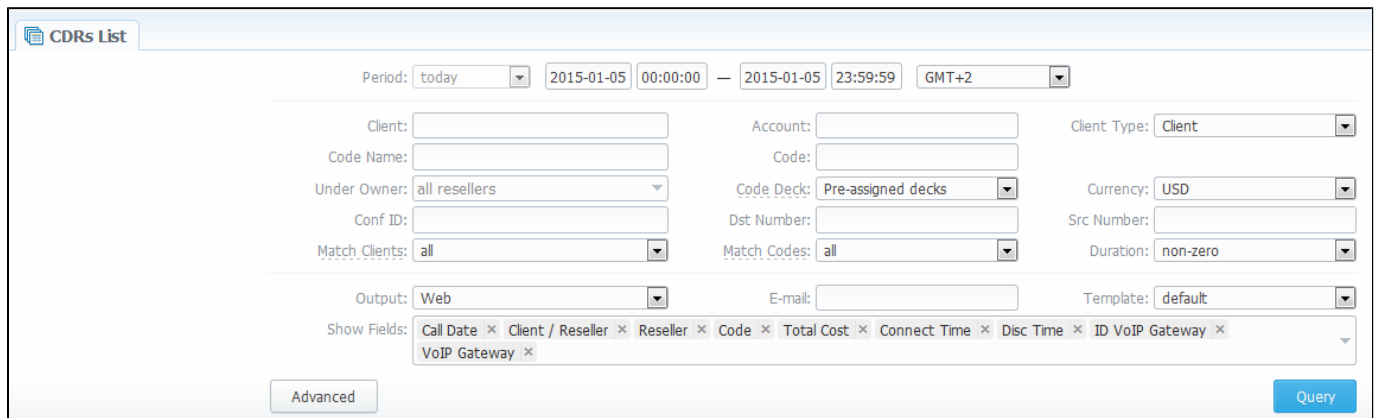
On this page

- [CDRs List Search Form](#)
- [Forming New Report](#)
- [Selecting Displayed Report Fields](#)
- [Knowledge Base Articles](#)

CDRs List Search Form

This section allows you to form a detailed calls statistics on each client with description of every call parameter. Main window represents a search form similar to those of other reports (Screenshot):

Screenshot: CDRs List search form



The screenshot shows the 'CDRs List' search form interface. It features a header with the title 'CDRs List' and a search bar. Below the search bar, there are several input fields and dropdown menus for filtering and configuring the report. The 'Period' is set to 'today' with a date range from '2015-01-05 00:00:00' to '2015-01-05 23:59:59' and a time zone of 'GMT+2'. Other fields include 'Client', 'Account', 'Client Type' (set to 'Client'), 'Code Name', 'Code', 'Under Owner' (set to 'all resellers'), 'Code Deck' (set to 'Pre-assigned decks'), 'Currency' (set to 'USD'), 'Conf ID', 'Dst Number', 'Src Number', 'Match Clients' (set to 'all'), 'Match Codes' (set to 'all'), 'Duration' (set to 'non-zero'), 'Output' (set to 'Web'), 'E-mail', and 'Template' (set to 'default'). A 'Show Fields' section lists various parameters to be displayed in the report, including 'Call Date', 'Client / Reseller', 'Reseller', 'Code', 'Total Cost', 'Connect Time', 'Disc Time', 'ID VoIP Gateway', and 'VoIP Gateway'. At the bottom, there are 'Advanced' and 'Query' buttons.

Forming New Report

To form a report, specify next parameters: choose client and any/all of his accounts, specify a period, phone prefix and prefix group, currency, call duration, call cost, calls route, calls result code, VoIP-host and select appropriate fields, that will be displayed in created report. Within parameters of *Output* field you can create a report as HTML-document, CSV or XLS file, or by selecting a *Delayed* parameter and entering the appropriate address you can forward the report file link to that e-mail. Then press "Query" button.

After selecting all needed parameters and fields your report will look like on screenshot below:

Screenshot: CDRs List report window

Type	Call Date	Gateway IP	Session Time	SRC Number BILL	DST Number EXT	DST Number BILL
termination	05/27/2014 11:18:33 +0000	106.193.141.52	01:22	2134012011234	610502021234	213021234
origination	05/26/2014 16:31:00 +0000	201.121.143.123	00:01	2134012011234	4405012021234	213021234
termination	05/26/2014 16:31:00 +0000	106.193.141.52	00:01	2134012011234	440502021234	213021234
termination	05/26/2014 16:30:59 +0000	106.193.141.52	00:08	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:59 +0000	201.121.143.123	01:06	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:59 +0000	106.193.141.52	01:06	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:59 +0000	201.121.143.123	00:08	2134012011234	4405012021234	213021234
origination	05/26/2014 16:30:58 +0000	201.121.143.123	00:20	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:58 +0000	106.193.141.52	00:20	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:57 +0000	201.121.143.123	00:39	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:57 +0000	106.193.141.52	00:39	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:56 +0000	201.121.143.123	01:21	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:56 +0000	106.193.141.52	01:21	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:55 +0000	201.121.143.123	00:28	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:55 +0000	106.193.141.52	00:28	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:55 +0000	201.121.143.123	01:22	2134012011234	4405012021234	213021234
termination	05/26/2014 16:30:55 +0000	106.193.141.52	01:22	2134012011234	440502021234	213021234
termination	05/26/2014 16:30:54 +0000	106.193.141.52	01:06	2134012011234	440502021234	213021234
origination	05/26/2014 16:30:54 +0000	201.121.143.123	01:06	2134012011234	4405012021234	213021234
origination	05/26/2014 16:30:53 +0000	201.121.143.123	00:03	2134012011234	4405012021234	213021234

Selecting Displayed Report Fields

Fields that will be displayed in report can be selected from "Show fields" list in search form. There are some default values selected from the list as you enter CDRs List section of the system.

All possible report fields description:

Field	Description
Status	Call processing state
Type	Call route (incoming / outgoing)
Call Date	Call date
ID Client	Client's ID
Client / Reseller	Client or reseller name
Account Name	Respective used account
Gateway IP	Client's gateway IP
Gateway Name	Client's gateway name
ID Reseller	Reseller ID value
Reseller	Reseller-owner of client, if report was generated in per-client fashion
Country	Name of the country which corresponds to Code Name
Code Name	Name for respective code
Code	Destination code
ID Packages	ID of the package, that was used during billing of the respective call
Packages	Name of the package
Package Time	How much time was billed within package limit
Src Number	Billed source number
Dst Number	Billed destination number
Session Time	Call duration
Billed Time	Billed call duration
Rate	Destination rate

Cost	Call cost
Extra Rate	Extra destination rate (per 1 minute) that was used
Extra Cost	Extra call cost
Total Rate	Summary of destination rate and extra destination rate
Total Cost	Summary of call cost and extra call cost
Taxes Cost	Taxes cost
Res Status	Disconnect code status
Res Code	Disconnect code value
CDR ID	CDR ID value
Conf ID	Conference ID value
Call ID	Call ID value
Call Sign	Call sign value
SRC Number EXT	Caller number provided to VCS system from external source
SRC Number BILL	Phone number of the caller in billing system
DST Number EXT	Called number provided to VCS system from external source
DST Number BILL	Phone number of the called in billing system
Setup Time	Call setup time
Connect Time	Call connect time
Disc Time	Call completion time (disconnection)
PDD	Post dial delay
SCD	Session connect delay
Local Code	Local code value
Custom	Additional information for call (softswitch specific)
Bytes IN	Incoming amount of bytes
Bytes OUT	Outgoing amount of bytes
ID VoIP Gateway	VCS VoIP Gateway ID
VoIP Gateway	VoIP Gateway name
CDR Source	CDR source description

Knowledge Base Articles

- [What to do if there is no new statistics?](#)
- [Why new xDRs are not generated?](#)

Graphical Charts in Statistics

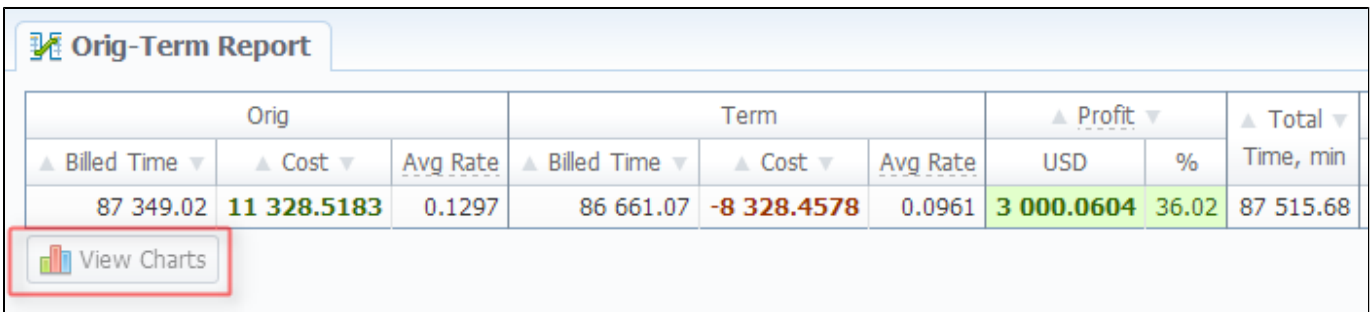
On this page

- [Accessing The Graphical Charts](#)
- [Graphical Charts Window](#)

Accessing The Graphical Charts

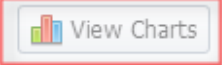
VCS incorporates a graphical charts for its Summary and Orig-Term reports. The graphical display allows for drastically better statistic information apprehension thus making data analysis even easier. To access the graphical charts, after creating a statistical report, you will have to press the "View Charts" button below the statistic tables (Screenshot down below).

Screenshot: "View Charts" button



The screenshot shows a table titled "Orig-Term Report" with columns for "Orig" and "Term". The "Orig" section includes "Billed Time", "Cost", and "Avg Rate". The "Term" section includes "Billed Time", "Cost", and "Avg Rate". There are also columns for "Profit" (USD and %) and "Total Time, min". A "View Charts" button is located below the table, highlighted with a red box.

Orig			Term			▲ Profit ▼		▲ Total ▼
▲ Billed Time ▼	▲ Cost ▼	Avg Rate	▲ Billed Time ▼	▲ Cost ▼	Avg Rate	USD	%	Time, min
87 349.02	11 328.5183	0.1297	86 661.07	-8 328.4578	0.0961	3 000.0604	36.02	87 515.68



Graphical Charts Window

The set of graphical charts consists of the following ones: *Total Cost*, *Total/Billed Time*, *ASR*, *ACD*, *Calls Count* and *Income/Expense/Revenue* (available only for Orig-Term report). The Y-axis of the chart represents the main parameter – the one that chart was named after (for example, for *Total Cost* it's an amount of money, for *Total/Billed Time* it's calls time, for *ASR* it's a percent value and so on), and the X-axis represents the grouping that was done when creating a statistics report (for this purpose "Group by #" fields are used – for example, by clients, codes, gateways, days etc.).

Screenshot: Graphical charts

chart by amCharts.com

Total Cost, USD

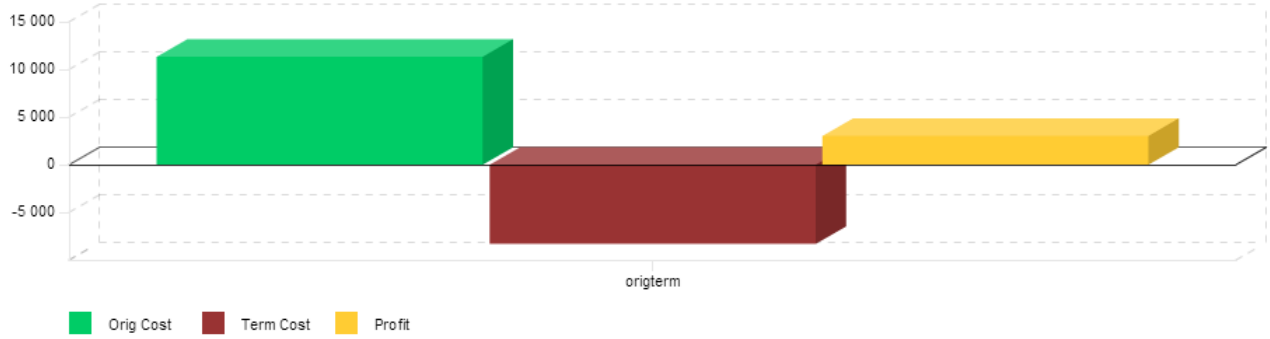


chart by amCharts.com

Time (Total / Billed) origination

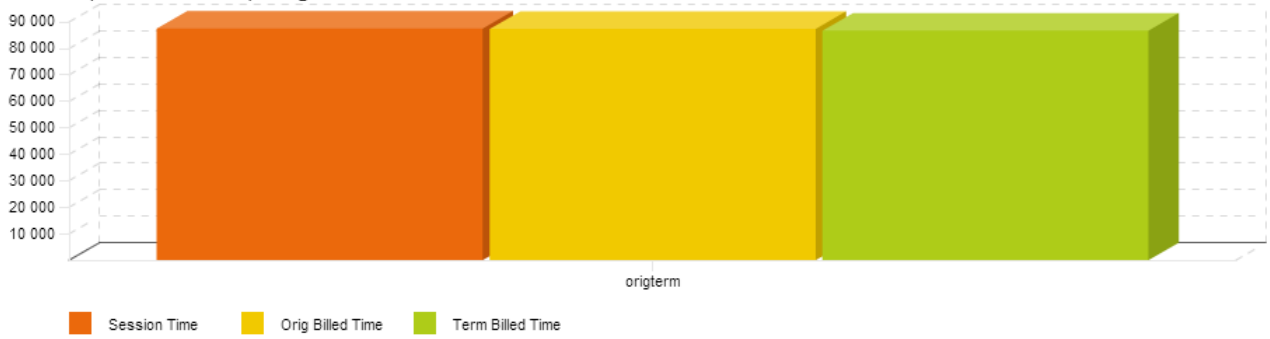


chart by amCharts.com

ASR, %

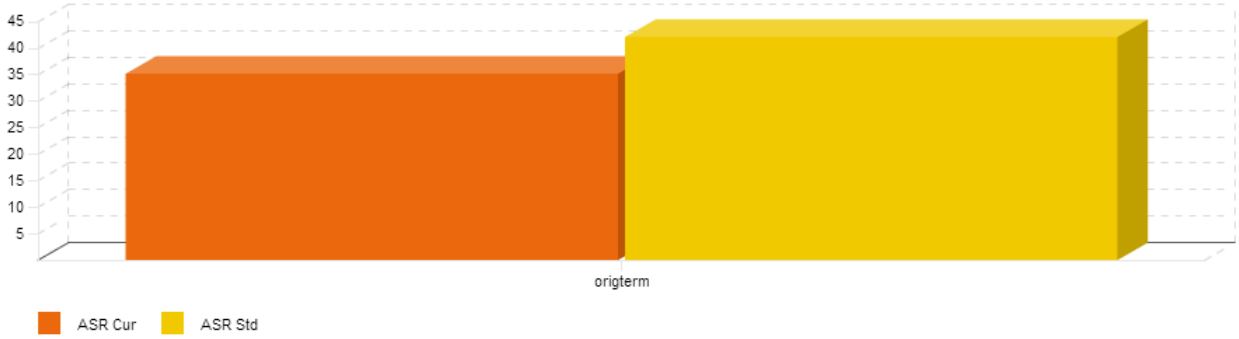


chart by amCharts.com

ACD, %

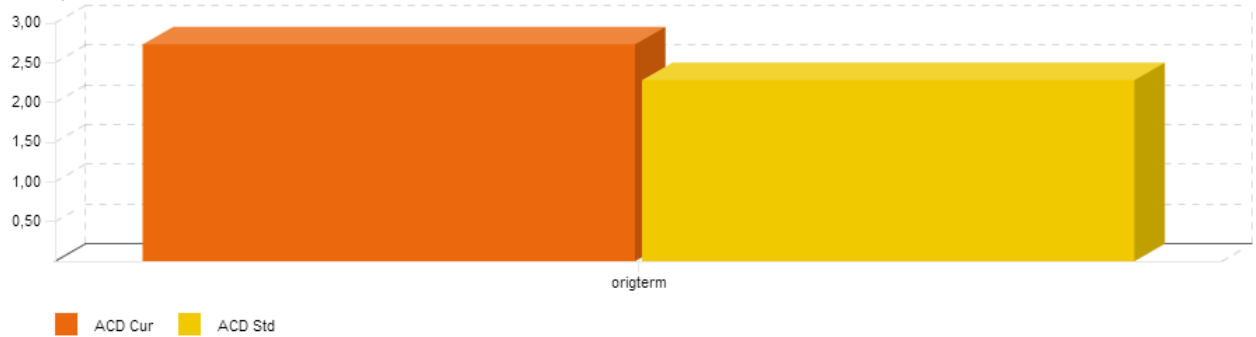
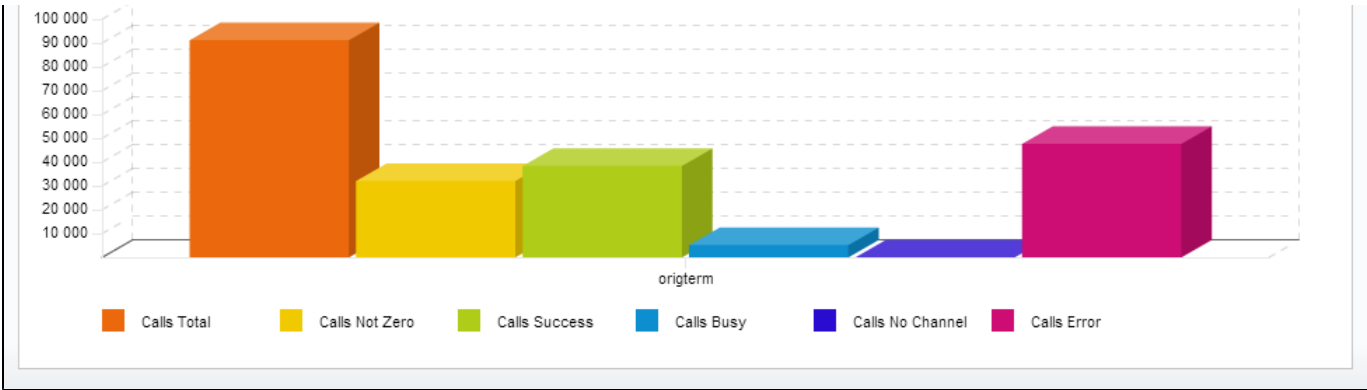


chart by amCharts.com

Calls Count



Mismatches Report

This section can help you find the calls or clients that were not recognized by the system due to unavailability of respective information. The main window of this section looks like on Screenshot below.

To create a report you need to specify a period in the lower form and press the "Query" button nearby. After system processes your request, you will be able to see the general info about unknown clients (left form) or unknown destinations (right form). To receive detailed info either on clients or destination press respective "Query" button.

Screenshot: Mismatches Report

CALLS WITH UNKNOWN CLIENTS

	origination	termination	all
Total Calls	0	0	0
Not Zero Calls	0	0	0
Total Time	0 min	0 min	0 min

Type:

Duration:

Output:

CALLS WITH UNKNOWN DESTINATIONS (KNOWN CLIENTS)

	origination	termination	all
Total Calls	0	0	0
Not Zero Calls	0	0	0
Total Time	0 min	0 min	0 min

Type:

Duration:

Output:

CALLS WITH UNKNOWN DESTINATIONS IN RESELLERS (KNOWN RESELLERS)

	origination	termination	all
Total Calls	0	0	0
Not Zero Calls	0	0	0
Total Time	0 min	0 min	0 min

Type:

Duration:

Output:

Knowledge Base Articles

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

Calls Rerating

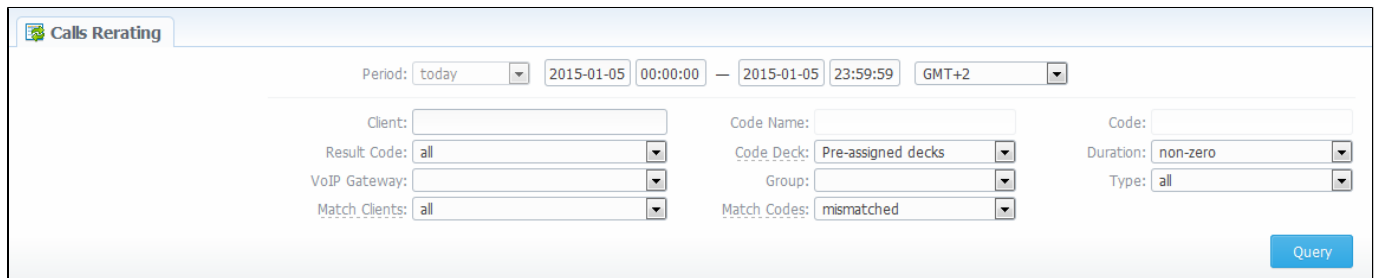
On this page

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

Calls Rerating Search Form

This section can be used to rerate some calls (this is needed when, for example, a change was made to rates, currencies or client accounts or you are trying to correct errors with *Mismatches Report*). Main window of this section is displayed as a search form:

Screenshot: Calls Rerating section search form



The screenshot shows a web interface for the 'Calls Rerating' section. At the top left, there is a tab labeled 'Calls Rerating'. Below the tab, there is a search form with the following fields and options:

- Period: today (dropdown), 2015-01-05 00:00:00 – 2015-01-05 23:59:59 GMT+2 (dropdown)
- Client: (text input)
- Code Name: (text input)
- Code: (text input)
- Result Code: all (dropdown)
- Code Deck: Pre-assigned decks (dropdown)
- Duration: non-zero (dropdown)
- VoIP Gateway: (text input)
- Group: (text input)
- Type: all (dropdown)
- Match Clients: all (dropdown)
- Match Codes: mismatched (dropdown)

A blue 'Query' button is located at the bottom right of the form.

Performing A Rerating

To perform a rerating, specify period, client, code name or phone number code and respective VoIP Gateway. Then press “*Query*” button and wait for search procedure to complete. Then confirm a rerating by pressing “*Confirm*” button.



Tip: “*Match Clients*” and “*Match Codes*” drop-down menus allow you to search for all calls in desired categories. Your choices are: *matched* (identified), *mismatched* (not identified), *all*.



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



Please note that re-rating of calls, that were billed by package, is now working with some limitations.

Knowledge Base Articles

- [How to do rerating?](#)

Reports to E-mail

On this page

- [Reports to E-mail List](#)
- [Forming Reports to E-mail](#)

Reports to E-mail List

This tool allows you to send *Summary* or *Orig-Term* reports to E-mail, to keep yourself informed about traffic status without need to login into system and request reports (Screenshot).

Screenshot: Reports to E-mail section main window



Name	Run	Interval	E-mail	Last sent	Company	Status
A	On 0 hours	24 hours	1@1.com	—	Reseller A	Active
B	Every 5 hours	48 hours	1@1.com	—	Reseller A	Active
C	Every 1 hours	74 hours	1@1.com	—	Reseller A	Disabled
D	On 10 hours	1 hours	1@1.com	—	Reseller A	Active

Forming Reports to E-mail

To access it, please go to *Statistics – Reports to E-mail* section. Press respective button for adding *Summary* or *Orig-Term* preset and specify how often report should be sent in “*Run*” field, and what last amount of hours of data it should include in “*Interval*” field. Don't forget to specify the e-mail address where report should be sent and correctly set report query, the same way you do for *Summary Report* and *Orig-Term Report*. After you save your preset you will be receiving your reports via e-mail in specified timeframes. On main page you can see the following parameters:

Column	Description
Name	Query name
Run	How often a report should be created for specified interval
Interval	Amount of last hours of statistics a report should include
E-mail	E-mail address, where report should be sent
Last sent	Date of latest successful sending of report to e-mail
Company	Name of reseller which owns current query



Tip:  icon displays, that the query status is *Active*, and  icon shows, that the query status is *Disabled*.

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 archive of system statistics packages manager. Statistics package is a pack of calls information, created during a respective day. Main window is displayed on screenshot below:

Screenshot: Archive Management section main window

ACTIVE STATISTICS PACKAGES					
Date	Total Legs	New Legs	Re-Rating Legs	Progress	
2014, APRIL (7)	78 37:42 75:24	0 00:00 00:00	0	100.00%	
2014, MARCH (4)	34 17:08 34:16	0 00:00 00:00	0	100.00%	
2014, FEBRUARY (7)	60 48:28 96:56	0 00:00 00:00	0	100.00%	

ARCHIVED STATISTICS PACKAGES		
Date	Filename	Size
2013, SEPTEMBER (1)		0.00 MB
2013, AUGUST (1)		0.01 MB
2013, JULY (3)		0.88 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 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"> • amount 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"> • amount 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 checkboxes:

Icon	Description
<input type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

	Updates selected package to latest database format (useful after system update to new version)
	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 pressed, 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 background.


Archived Statistics Packages

Archive Statistics Packages table houses statistics packages that are kept in 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 pressed, 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 section describes everything that relates to the Tools tab of JeraSoft VCS. For more details please check the related subsections of our Guide:

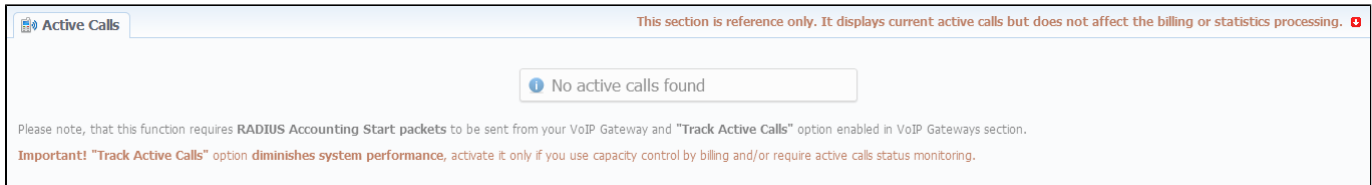
- [Active Calls](#)
- [CDRs Disputes Manager](#)
- [Factors Watcher](#)
- [Rates Analysis](#)
- [Rates Generator](#)

Active Calls

Active Calls section provides you with easy and convenient active calls monitoring tool. Upon access you will see the full list of active calls that are currently being processed by your switch.

The options that are available to you here are the following: you can filter calls list by origination or termination client / code group / code and group them by using *Group by #* drop-down boxes.

Screenshot: Active Calls main window



Knowledge Base Articles

- [Why there are no active sessions?](#)

CDRs Disputes Manager

On this page

- [CDRs 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](#)

CDRs Disputes List



CDRs Disputes Manager is full-featured add-on of the system, which allows you to make comparison of:


- CDRs given by your client/vendor with ones stored in the system;
- CDRs taken right away from switch with the CDRs stored in the system.

Screenshot: *CDRs Disputes List*

ID	Client / Account	Period	Total Qty	No L	No E	Updated
17	rework terminator / all accounts	12/04/2014 – 01/07/2014	7414	7414	55	15/07/2014 12:18:01 UTC
16	Alex Silver new / all accounts	10/06/2014 – 10/06/2014	7	7	0	15/07/2014 12:10:44 UTC
14	Alex Silver / all accounts	10/06/2014 – 10/06/2014	7	7	0	15/07/2014 12:03:56 UTC
12	rework originator / all accounts	10/06/2014 – 29/06/2014	54	54	0	15/07/2014 11:15:32 UTC

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 in 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*

Import

Client:

Account:

Type: origination

Code Name:

Code:

Code Deck:

Select File: Choose File No file chosen

Date Format: auto auto

Period: last week 2015-03-09 – 2015-03-15

GMT+2

Override timezone:

Process »

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 desired destination for comparison
Code	Specify code of 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 #ffc107; padding: 10px; margin-top: 10px; background-color: #fff3cd;"> 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 for 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.

Step 2. Recognizing The File

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	380501112233	25	08/10/2014 18:34:16 +0000	08/10/2014 18:34:41 +0000	<input type="checkbox"/>
38050	380501112233	21	08/10/2014 18:31:31 +0000	08/10/2014 18:31:52 +0000	<input type="checkbox"/>
38050	380501112233	68	08/10/2014 18:29:28 +0000	08/10/2014 18:30:36 +0000	<input type="checkbox"/>
38050	380501112233	63	08/10/2014 17:30:15 +0000	08/10/2014 17:31:18 +0000	<input type="checkbox"/>
38050	380501112233	30	08/10/2014 17:30:28 +0000	08/10/2014 17:30:58 +0000	<input type="checkbox"/>
38050	380501112233	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 press "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).

Screenshot: Disputes Details window. Step 3

Dispute Details
✕

Update

COMPARISON OPTIONS

SRC Number:

DST Number:

Connect Time:

Disconnect Time:

Session Time:

i

Please press the "Update" button,
select the comparison options and press
the "Refresh" button

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)

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 press "Query" button, and if you want to clear the specified settings press "Reset" button.

Screenshot: Dispute Details window. Search form

Dispute Details						
Update						
Rows 1 – 20 of 10856						
	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		
L	No matched CDRs					
E	380509595923	380671240103	2014-09-24 16:41:40+00	2014-09-24 16:42:14+00		
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	

SRC Number:

DST Number:

Type:

Output:

Reset Query

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 press "Process" button and all changes will be applied.

Screenshot: Mass Edit button

CDRs Disputes

Search...

Add New Dispute

Mass Edit

Status: In Proce

Process

Rows 1 - 5 of 5

Pages: 1

ID	Account	Period	Total Qty	No L	No E	Updated
26	Alex S	10/06/2014 - 10/06/2014	7	7	0	06/08/2014 13:30:02 +0300
16	Alex S	10/06/2014 - 10/06/2014	7	7	0	29/07/2014 16:59:06 +0300
17	rework terminator / all accounts	12/04/2014 - 01/07/2014	7414	7414	55	15/07/2014 15:18:01 +0300
14	Alex Silver / all accounts	10/06/2014 - 10/06/2014	7	7	0	15/07/2014 15:03:56 +0300
12	rework originator / all accounts	10/06/2014 - 29/06/2014	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	Query
2	A Analyze by: Summary report Check time: 30 / 30 min No check has been made yet	0	Client: - Code Name: - Group By: - Owner: - Code: - VoIP GW: -
3	B Analyze by: CDRs List report Check time: 60 / 10 min No check has been made yet	0	Client: - Code Name: - Group By: - Owner: - Code: - VoIP GW: -

Creating New Query

The tool workout is based on periodical queries of statistic information. To create a new query click "New Factors Watcher" button. You need to specify next parameters in a following form:

Screenshot: Adding new Factors Watcher query

New Factors Watcher

Name:

Analyze by:

Analyze mode:

Check every:

Analyze interval of:

Time zone:

Period Start:

QUERY

Client: Account:

Code Name: Code:

Under Owner: Code Deck: VoIP Gateway:

Group By #1: Group By #2: Group By #3:


Field	Description
Name	Query name

Analyze by	Select base report (Summary or CDRs List) as base for current query. Different reports provide 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
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
Check every, min	How often to perform checks
Analyze interval of, min	What interval of time to check
Timezone	Specify timezone that will be used when pulling reports / blocking routes
Period Start	Enter the specific time to start counting the period from
Calendar interval	What interval of calendar time to check (each hour, each day, etc.)
Client	Select a client
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", new query will appear on the list in main window. You can edit properties of this query later by clicking  icon.

Configuring Watcher Rules

Next step you need to take is 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 new window click "add rule" button and fill the set of fields to add an appropriate rule.

Screenshot: Editing Factors Watcher rules

Rules List
test

+ add rule

Priority	Match				Factors	Action	Lock Period	Periodic lock	Expiration Date
	Call Origin	Client	Account	VoIP Gateway					
0	all				time_total < 50	Alert	0 min	<input type="checkbox"/>	

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	A set of parameters that are used as base for checks
	<ul style="list-style-type: none"> • Call Origin Type of route to check (<i>Origination, Termination or both</i>)
	<ul style="list-style-type: none"> • Client Specify the client to apply rules to
	<ul style="list-style-type: none"> • Account Specify the account to apply rules to
	<ul style="list-style-type: none"> • Code Name Specify the code name to apply rules to
	<ul style="list-style-type: none"> • Code Specify the code to apply rules to
Factors	Factors that are applied to current rule.
	Rules must be listed with delimiting symbol “;”. 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> 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
Action	An action that should be taken if a matched rule is found.
	There are three options: Alert , Block Code and Block Code Name . When one of these options is applied, the message will be shown in the section <i>Events log</i> .
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 are 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 current query was created.

“**Block Code**” and “**Block Code Name**” options in the “**Action**” column are available only if you set respective grouping in the *Tools / Factors Watcher settings*. For example, if you defined a code name in query, you will be able to block code names in watcher rules, etc.

Screenshot: Rules List

Rules List

+ add rule

Priority	Match				Factors	Action	Lock Period	Periodic lock	Expiration Date	
	Call Origin	Code	Code Name	Account						
0	all					Alert	0 min	<input type="checkbox"/>		

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_bill, 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

Screenshot: Factors Watcher form

New Factors Watcher

Name:

Analyze by: Summary report

Analyze mode: Fixed period

Check every: 30 minute

Analyze interval of: 30 minute

Time zone: UTC

Period Start:

QUERY

Client:

Account:

Code Name:

Code:

Under Owner: all resellers

Code Deck: Pre-assigned decks

VoIP Gateway:

Group By #1: Code Name

Group By #2: Code

Group By #3:

Test Query

OK Cancel Apply

Rates Analysis

Rates Analysis is an advanced feature of VCS Rates Management Module, that allows you to analyze and compare rates within VCS's web-interface without use of any third-party software. Main window looks like a search form:

Screenshot: Rates Analysis section search form

Field	Description
Rate Tables	Specify rate tables for analysis
Originators	Enter originators for analysis
Terminators	Enter terminators for analysis
Master table	Specify a rate table which rates will be compared (Please note that this field is active only during rate tables analysis)
Rate Group	Set a group where these rates belongs to
Code Name	Select a code group
Outlook	Select a form of a query display: <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)
Get margins for	Define a rate table from which respective margins will be getting
Output	Choose the form in which the query will be received: <ul style="list-style-type: none"> • Web • Excel CSV • Excel XLS
Code	Specify the code
Code Deck	Select a code deck to pull code names from <ul style="list-style-type: none"> • Pre-assigned decks use of code decks assigned to each clients' rate table
Actual on	Define the day and time
Group by	Group query by selectable parameter <ul style="list-style-type: none"> • code aggregation by default output

	<ul style="list-style-type: none"> • code name 	grouping by rate rows with the same names and rates for all codes in each rate table
Country	Specify a country	
Currency	Select a currency	
Rate age	Define the number of days	
Check-box "simulate long codes"	Check if a rate table does not have codes which are presented in other tables for simulating them using shorter codes	

To analyze and compare different rates select one or few rate tables in the form to the left (analysis is divided by originator's rates, terminator's rates and rate tables), specify code names or specific code (you can use «*» sign to specify all), date for which these rates were actual, desirable output format and press «Query» button.

System will form a list of rates with prices for each destination. The highest rate available for 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.

If you checked «simulate long codes» checkbox, system will try to simulate the longest available code with shorter one. For example, we analyze 2 rate tables, one of which has code 380, and the other has 380 and 38044 codes. When mentioned checkbox is active, the first rate table will have unavailable 3 8044 code simulated with the price of available 380. Rates such as these have «Simulated» label when you hover mouse pointer over them, and are colored in light-red, light-green and grey respectively.

Also, you can analyze margins by selecting a base rate table in «Get margins for» field.

«Outlook» field allows you to build resulting data in simple comparison list or LCR table, if you prefer that kind of outlook.

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: Configuring Rates Generator query

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: Optimization options check boxes

New 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: DKK

Setup Fee: DKK

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
Simple Optimization	Applies 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 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 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 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: "Adjust Results" check box

New 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: DKK
Setup Fee: DKK
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

New 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: DKK
Setup Fee: DKK
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 cheapest rate, if "2" – second cheapest etc.)

Quality Options

Screenshot: Rates Generator Quality Options

The screenshot shows the 'New Rates Generator' window with the following sections:

- General Information:** Name, Reseller (Reseller A), Code deck, Currency (DKK), and Description.
- SIMPLE OPTIMIZATION:** Mode (min).
- VERTICAL OPTIMIZATION:** Target < parent: 0%, Target > parent: 0%.
- HORIZONTAL OPTIMIZATION:** Target < parent: 0%, Target > parent: 0%.
- ADJUST RESULTS:** Rate, Setup Fee (0 DKK), Min Time (1 sec), Interval (1 sec), Grace Time (0 sec), and Time Profile (all time).
- ADVANCED OPTIONS:** Detect fake (5), Skip distance (10%), Rate position (1).
- QUALITY OPTIONS (highlighted in red):** Analyze period (24 hours), Code min time (60 min), and Unmatched price (100).

Buttons at the bottom: OK, Cancel, Apply.

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 in the "New Rates Generator" window 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 query. Here is what you can specify in rule's settings (Screenshot):

Screenshot: Rates Generator "Add Rule" window

Add Rule
new

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
	<ul style="list-style-type: none"> 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 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*, other 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 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 under the drop-down list (Screenshots below):

Screenshot: Adding Source to the rule

new

Add Rule

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

 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 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.

Routing Details

This document 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 subsections below to get more information. 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 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
5	DR: Complex LCR	Company Name	—	longest only	by code / appeal	2
4	DR: Complex Quality	Company Name	—	longest only	by code / appeal	1
12	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	DEFAULT	longest only	by code / appeal	1
1	DR: Simple Quality	Company Name	—	all matching	by appeal / code	3
9	NEW	Company Name	—	all matching	by code / appeal	3
6	Plan1	Company Name	DEFAULT	all matching	by code / appeal	14
10	test	Reseller_A	DEFAULT	all matching	by appeal / code	3
8	Test_1	Reseller_A	—	longest only	by code / appeal	3
11	Test_2	Company Name	Default_new	all matching	by appeal / code	0

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 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: “New Routing Plan” window

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)

	<ul style="list-style-type: none"> • "Rooting Loop protection" check box 	<p>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.</p> <p>It is enable by default.</p>
Rules processing	Options of rules processing	
	<ul style="list-style-type: none"> • Rules Hunting 	<p>Select a hunting mode (the way how rules will be executed). They are the following:</p> <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 	<p>Specify a method of routes sorting in routing table. The options are:</p> <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)



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 «add rule» and fill the following:

Screenshot: Routing plan contents

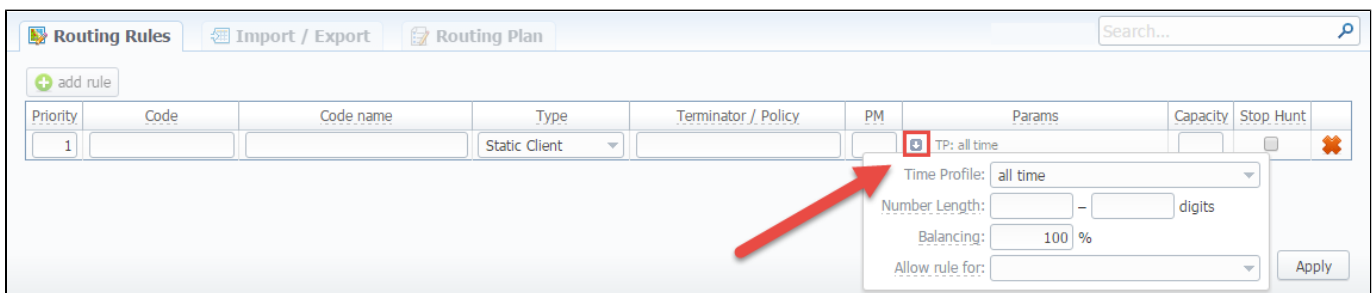
Priority	Code	Code name	Type	Terminator / Policy	PM	Params	Capacity	Stop Hunt
1	Any destination		DID			TP: all time		<input type="checkbox"/>
1	*		Dynami	Simple Quality		TP: all time		<input type="checkbox"/>
2	966*		Static	Vendor D / all accounts		TP: all time B: 40%		<input type="checkbox"/>
2	966*		Static	Vendor C / all accounts		TP: all time B: 60%		<input type="checkbox"/>

Field	Description
Priority	Define a priority of rules execution, if they have similar code or code name specified
Code	<p>Enter a code which will be used in current routing rule, use * as wildcard.</p> <p>If DID type for current routing rule is selected, you may specify a code:</p> <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 										
Terminator / Policy	If you selected static type, you may specify a terminator here; if you selected dynamic type, specify routing policy for current rule										
PM	Define a <i>Profit Margin</i> value for current rule here										
Params	A number of additional parameters available here <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Time Profile</td> <td>specify time profile</td> </tr> <tr> <td>Number Length</td> <td>set minimum and maximum length of destination number, that will be matched by this routing rule</td> </tr> <tr> <td>Balancing</td> <td>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 Please note that after changing <i>balancing value</i>, it is needed to restart SIP and/or RADIUS daemons.</div></td> </tr> <tr> <td>Route within</td> <td>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)</td> </tr> <tr> <td>Allow rule for</td> <td>select list of origination routing groups for which the current rule will be allowed. If nothing is specified - works for all accounts.</td> </tr> </table>	Time Profile	specify time profile	Number Length	set minimum and maximum length of destination number, that will be matched by this routing rule	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 Please note that after changing <i>balancing value</i>, it is needed to restart SIP and/or RADIUS daemons.</div>	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)	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.
Time Profile	specify time profile										
Number Length	set minimum and maximum length of destination number, that will be matched by this routing rule										
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 Please note that after changing <i>balancing value</i>, it is needed to restart SIP and/or RADIUS daemons.</div>										
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)										
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



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				



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 click *Presets*.



To quick open Routing Presets: Go to the *Management*, in the *Clients* section, click *Edit Routing Presets*  icon next to the name of respective customer.


Screenshot: Routing presets settings

You can add origination and termination presets, to block desired destination or code by selecting «*Deny*» *check box*.

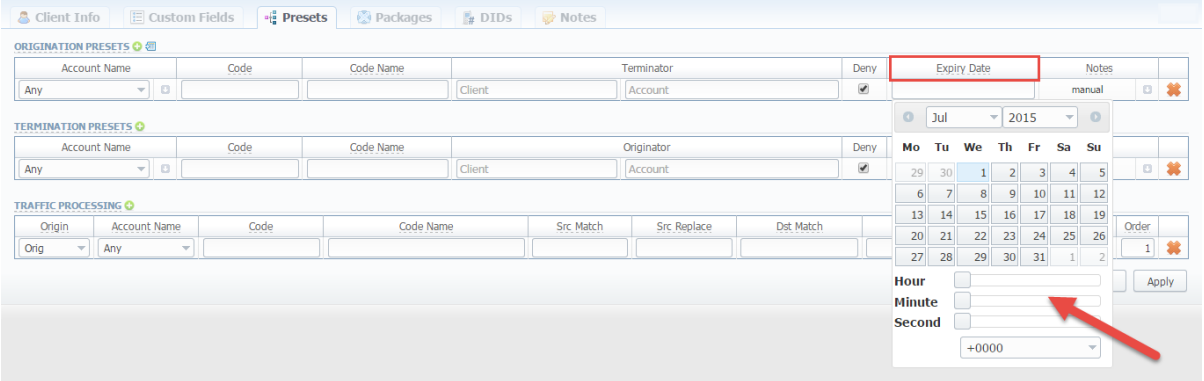
Also, you can perform different number translations under «*Traffic Processing*». These translation rules use POSIX expressions syntax.

For example, if 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 denied to route</i>)
Originator	Define a customer for whom this routing rule will work

Deny	Enable this to deny current route selection				
Expiry Date	<p>Set a 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 modifocated and now you need to indicate the “MM/YY/DD” instead of setting the duration in minutes (existed in the previous version)</p> <p>Screenshot: <i>Expire date in Routing presets</i></p> 				
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 <p>For calls originated from a client</p>
	<ul style="list-style-type: none"> TERM <p>For calls terminated to a client</p>
	<ul style="list-style-type: none"> DR <p>On Dynamic Routing, before sending calls to a terminator</p>
Account Name	Select a respective account
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

Routing Analysis

On this page

- [Routing Analysis Search Form](#)
- [Forming DR Analysis Report](#)
- [Knowledge Base Articles](#)

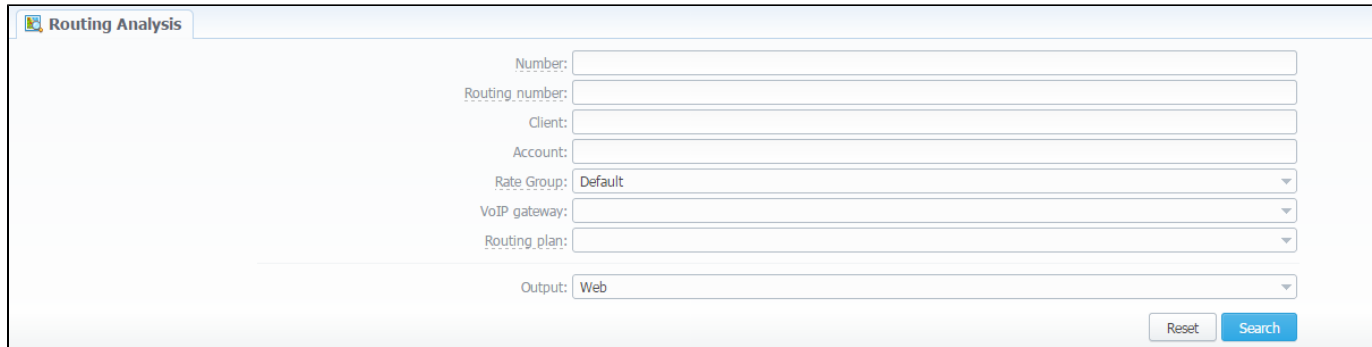
Routing Analysis Search Form

Routing Analysis section represents a route analyzer tool that allows you to manage dynamical routes and simulate different routing models without hurting live voice traffic.

This section can be accessed if you 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.

Main window of *Routing Analysis* section represents a search form with following parameters:

Screenshot: DR Analysis search form



The screenshot shows a web interface for the Routing Analysis search form. It features several input fields and dropdown menus. The fields are: Number (text input), Routing number (text input), Client (text input), Account (text input), Rate Group (dropdown menu with 'Default' selected), VoIP gateway (dropdown menu), Routing plan (dropdown menu), and Output (dropdown menu with 'Web' selected). At the bottom right, there are two buttons: 'Reset' and 'Search'.

Field	Description
Number	Enter a phone number here to define a destination (you can use «*» as any symbol, for example, 380* means any number that begins with 380)
Routing number	Specify the number supplied by LRN DIP providers. Note that the original destination number will be preserved in response during performing routing for the specified number
Client	Select a client you want to create report about
Account	Select an account you want to create report about
Rate Group	A group, which this rate belongs to. Refers to Jurisdictional Billing and Routing Module
VoIP gateway	Select a desired VoIP gateway here
Routing Plan	Select here some specific routing plan
Output	Select result output format (web, XLS or CSV file)

When all required information is entered, click «Query» button.

Forming DR Analysis Report

Here is how an analysis report may look like:

Screenshot: DR Analysis report

Number: 38044 Routing Plan: DR: Simple Quality DR Order: by appeal Rules Hunting: all matching			Client: Client_originator Destination: 380 UKRAINE Orig Rate: 0.9100 USD			Client Capacity: 5 0 active calls Account Capacity: — 0 active calls Reseller Capacity: — 0 active calls			
TYPE: NORMAL									
Rank			Appeal	Terminator	Code	Term Rate	Account IP / Name	Dst Number	VoIP gateway
9			0.4000	Vendor Lotos account_2	3	0.4000 USD	184.176.103.55/32	38044	Any
10			0.9000	Vega account_1	3	0.9000 USD	184.173.103.52/32	38044	Any
11			0.9000	Mango lo_quality	3	0.9000 USD	106.193.141.52/32	38044	Any
12			0.9000	Mango account_1	3	0.9000 USD	145.27.99.8/32	38044	Any
13			0.9100	Vendor Figaro account_1	380 UKRAINE	0.9100 USD	184.173.103.52/32	09838044	Any

The resulting list shows detailed information regarding routing, including route availability / unavailability, profit margin control, reseller / group limitation, resulting appeal, code rate etc.

Note

Routing Analysis shows routes based on routing table built on last run of Dynamic Routing Manager. So won't be able to see last changes with Routing Rules until Dynamic Routing Manager will be restarted.

If applicable, you can check the **Next Term Rate** in the report, find **Term Rate** column, and then click the up arrow next to the specified amount.

Screenshot: Routing Analysis report

TYPE: NORMAL									
Rank			Appeal	Terminator	Code	Term Rate	Account IP / Name	Dst Number	VoIP gateway
1						0.0741 USD	22.22.22.14/32	2000000000	Any
2						0.0730 USD	22.22.22.13/32	2000000000	Any
						Next Rate: 0.0810 USD ▲ 0.0080 USD Effective From: 09/20/2015 00:00:00 +0000			
TYPE: NOT MATCHED RESELLERS LIMITATIONS									

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?](#)

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 'Rows 1 - 5 of 5' and 'Pages: 1' are visible. The main content 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.

Configuration

This section of our Guide contains everything that relates to the *Configuration* tab of JeraSoft VoIP Carrier Suite. For more details please go to the related subsections:

- [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. Main window of this section is presented on Screenshot:

Screenshot: Code Decks section main window



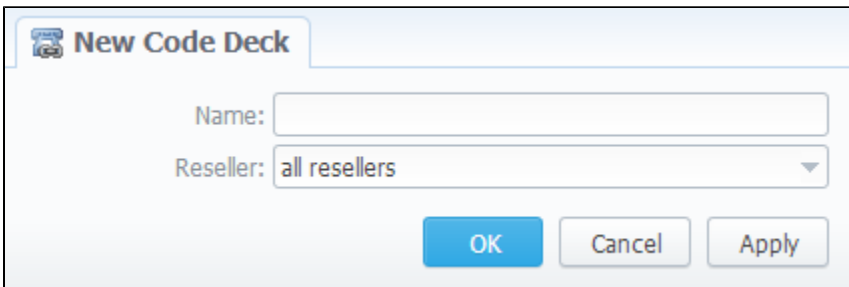
ID	Deck Name	Reseller	Codes		
1	DEFAULT	any reseller	66932		
2	A	any reseller	0		
3	B	Reseller A	0		
4	C	Reseller B	0		

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, press “New Code Deck” button and specify the deck name and reseller it belongs to (Screenshot):

Screenshot: New Code Deck window



New Code Deck

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		
1	North America			
1201555	USA Directory Assistance			
1201763	United States - OffNet			
12017632	United States - OffNet			
12017636	United States - OffNet			
12017637	United States - OffNet			
12017638	United States - OffNet			
12017639	United States - OffNet			
1202555	USA Directory Assistance			
1203547	United States - OffNet			
1203555	USA Directory Assistance			
1203902	United States - OffNet			
1204	Canada-Manitoba			

Adding Codes

When you press "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: New Code Window

New Code
DEFAULT

Code Deck: **DEFAULT**

Code:

Code Name:

Country:

Field	Description
Code	Destination code
Code Name	Displayed name of a code group
Country	Which country the codes in current group will belong to

Importing Codes

It is the possibility to import a list of codes and code names from file, the whole import process can be logically divided in 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

Import Codes
DEFAULT

FILE PROCESS

Select file to import: No file chosen

Fields Delimiter:

IMPORT PROCESS

Deck update mode:

On errors:

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

ROWS AND COLUMNS SELECT			
			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"/>

Return Import

After you press "Import" button, 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 contents 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

Codes List Import Codes **Export Codes** DEFAULT

Fields delimiter: ,

With headers row

OK Cancel

Currencies

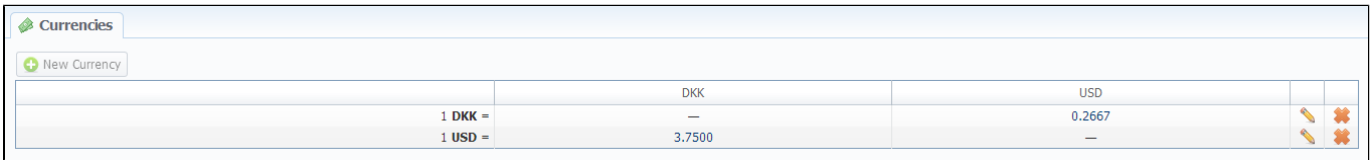
On this page

- [Currencies List](#)
- [Adding New Currency](#)
- [Specifying Currencies Rate](#)

Currencies List

This section displays the list of all currencies, registered in system:

Screenshot: Currencies section main window



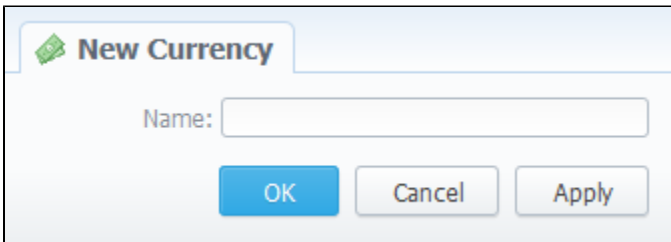
	DKK	USD		
1 DKK =	—	0.2667		
1 USD =	3.7500	—		

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 pressing “New Currency” button. In pop-up window (Screenshot below), you should specify name for the new currency:

Screenshot: “New Currency” window



New Currency

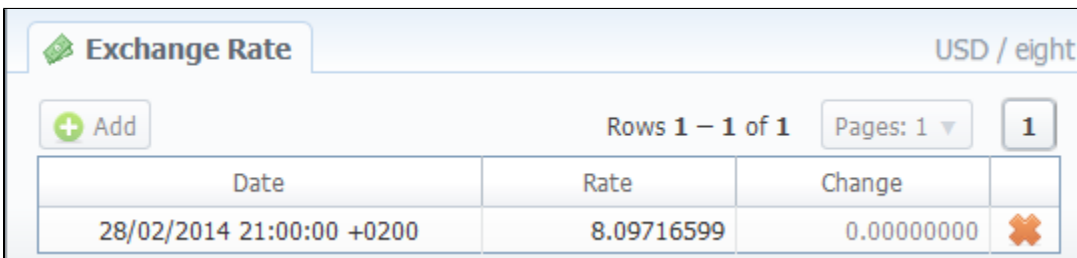
Name:

Specifying Currencies Rate

After you add currency, you need to specify its rate. To do this, press respective exchange rate.

In pop-up window (Screenshot below) 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 USD / eight

Rows 1 – 1 of 1 Pages: 1

Date	Rate	Change	
28/02/2014 21:00:00 +0200	8.09716599	0.00000000	

To add new currency's rate press "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

Rate	Change	
8.09716599	0.00000000	

Tip: Statistics data in new currency will be available after adding currency into system, but if currency has old start date and you want old data to be billed in this currency, you need to run calls rerating.

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

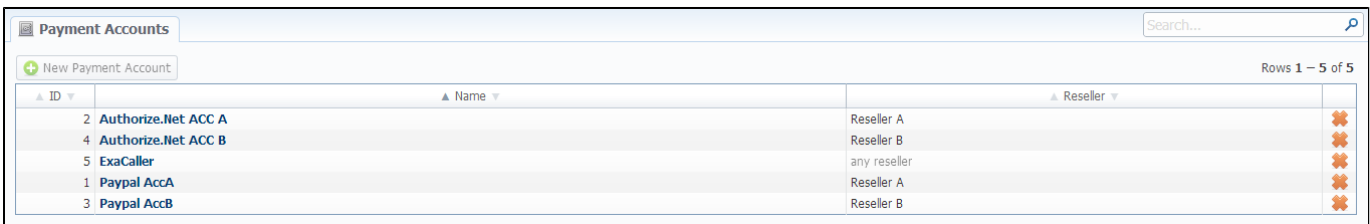
On this page

- [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 (Screenshot below). 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 when applying respective payments, you will be able to define that payment origin by selecting respective account.

Screenshot: *Payment Accounts* section main window

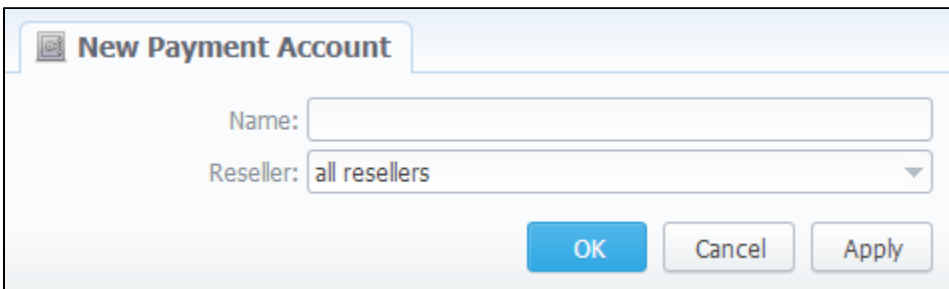


ID	Name	Reseller	
2	Authorize.Net ACC A	Reseller A	✖
4	Authorize.Net ACC B	Reseller B	✖
5	ExaCaller	any reseller	✖
1	Paypal AccA	Reseller A	✖
3	Paypal AccB	Reseller B	✖

Adding New Payment Account

To create new payment account, simply click "New Payment Account" button, specify account name and a reseller (Screenshot below). After this, this account will be available in *Transactions* section.

Screenshot: *Adding new payment account*



New Payment Account

Name:

Reseller:

Payment Terms

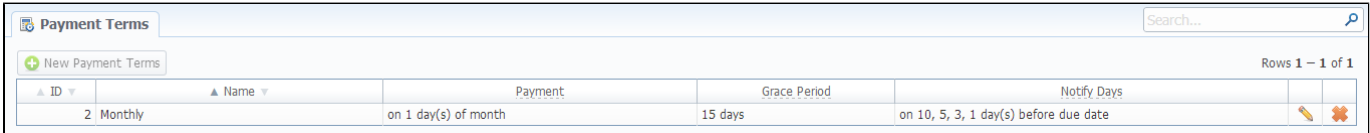
On this page

- [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. Main window is displayed on Screenshot:

Screenshot: *Payment Terms section main window*



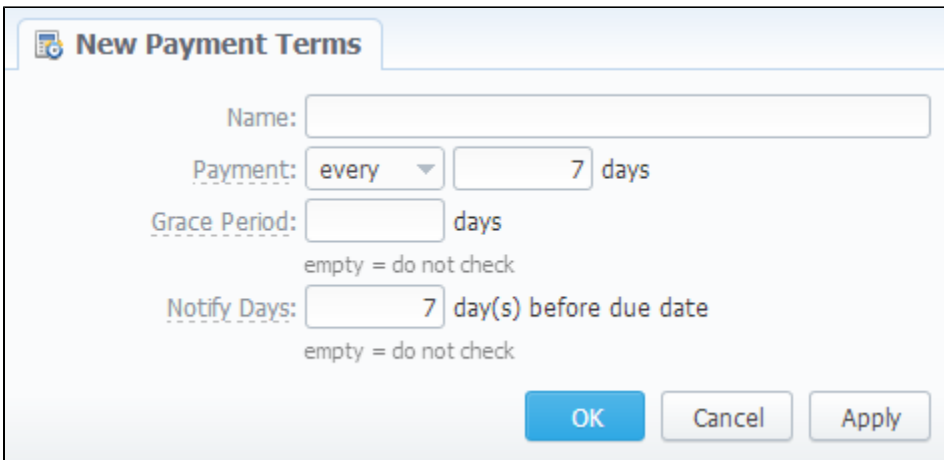
ID	Name	Payment	Grace Period	Notify Days		
2	Monthly	on 1 day(s) of month	15 days	on 10, 5, 3, 1 day(s) before due date		

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 profile*



New Payment Terms

Name:

Payment: 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 (so-called "Deferral period")

Notify Days	<p>Here you can specify by how many days before the payment date reminders will be sent to client (for example, if you will enter <i>10</i> as a value, the reminder will be sent 10 days before the payment date)</p> <p>You can specify more than one value in this field dividing them with comma symbol - “;”</p>
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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* (Screenshot).

Screenshot: Payment Gateways section main window

AUTHORIZE.NET

ORDER POSITION: 0

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:	1224	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.

MONEYBOOKERS

ORDER POSITION: 0

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:	1224	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: 0

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.
Fee:	0 % + 0 USD	PayPal additional fee. Total amount will calculated by the follow formula: amount + fee(%) + fixed_fee
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:	1224	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: 0

E-mail:	<input type="text"/>	Your QIWI e-mail, payment recipient.
Provider ID:	0	QIWI provider ID.
Payment Account:	1224	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.

TOP-UP CARDS

ORDER POSITION: 0

Payment Account:	1224	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: 0

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

Brand Id:	<input type="text"/>	validate the merchant account. 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:	<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:	1224 ▾	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.

[Update](#)

Configuring Payment Gateways

To configure them, first thing you need to do is 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

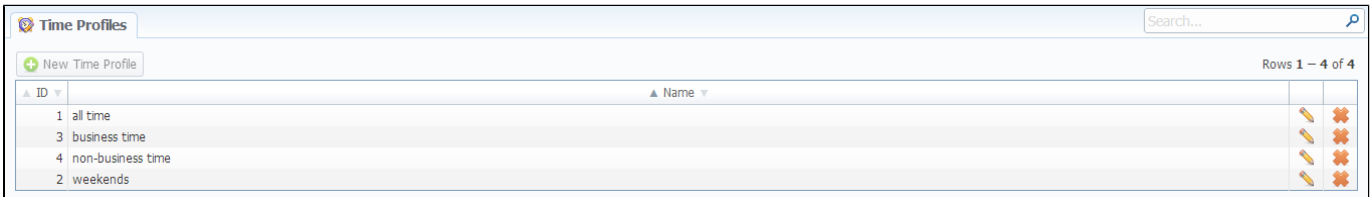
On this page

- [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

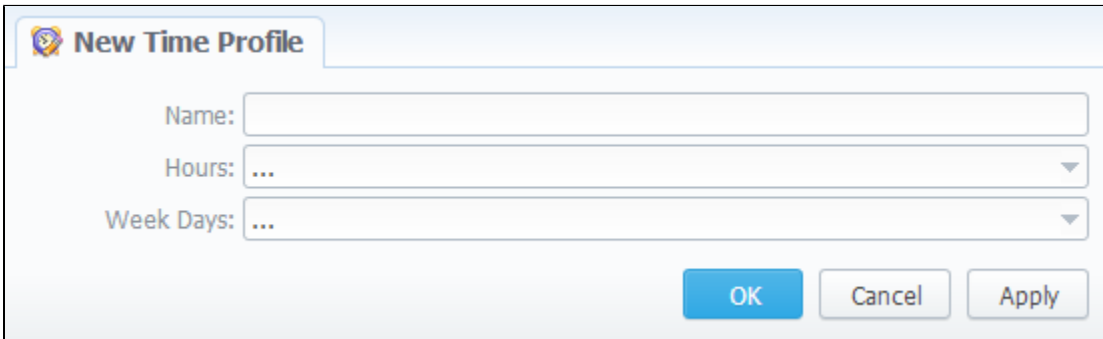


ID	Name		
1	all time		
3	business time		
4	non-business time		
2	weekends		

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

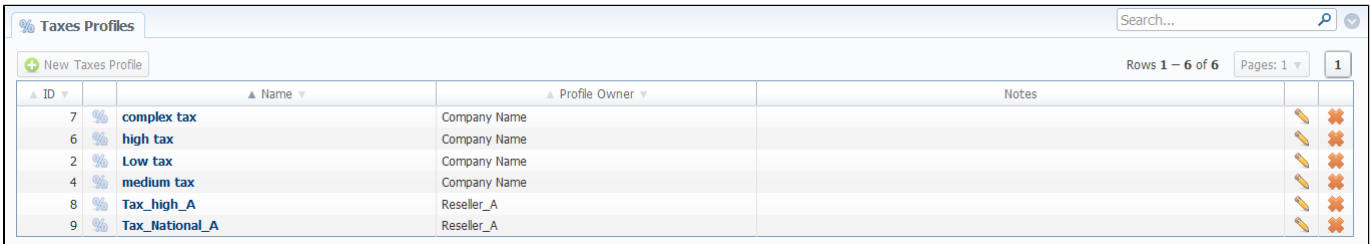
On this page

- [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



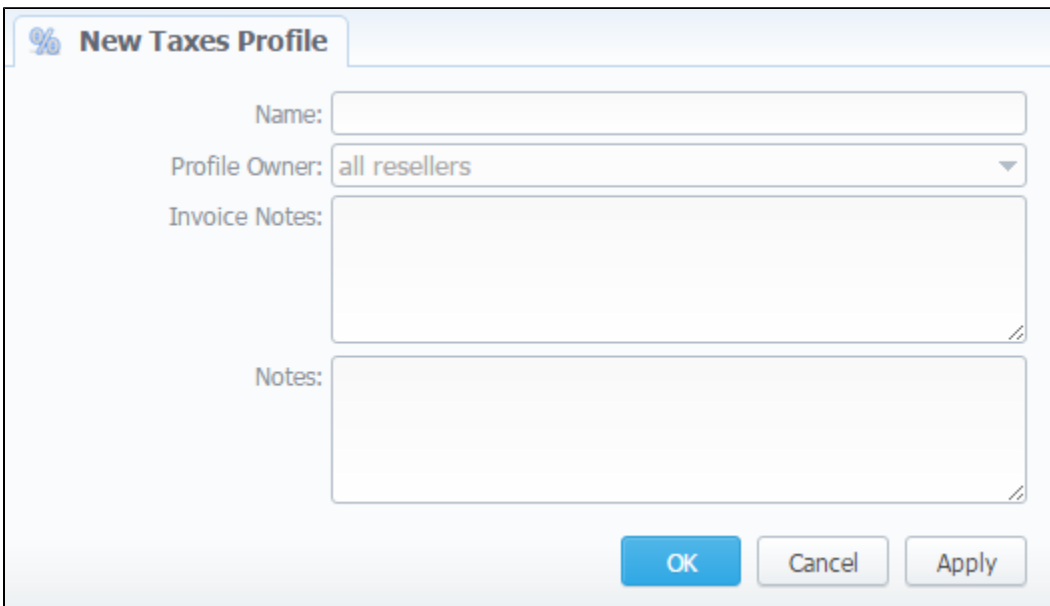
ID	Name	Profile Owner	Notes
7	complex tax	Company Name	
6	high tax	Company Name	
2	Low tax	Company Name	
4	medium tax	Company Name	
8	Tax_high_A	Reseller_A	
9	Tax_National_A	Reseller_A	

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:



OK Cancel Apply

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

 **Edit Tax Values** complex tax 

Rows **1 – 3** of **3** Pages: 1 ▾ **1**

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.

Groups

On this page

- [Client Groups List](#)
- [Adding New Client Group](#)
- [Account Groups List](#)
- [Adding New Account Group](#)
- [DID Groups List](#)
- [Adding New DID Group](#)
- [Rate Groups List](#)
- [Adding New Rate Group](#)
- [VoIP Host Groups List](#)
- [Knowledge Base Articles](#)

This section consists of all groups in the system (groups of clients, accounts, etc.).

These groups are represented in the form of tabs, for selecting simply click the tab with a respective name.

Client Groups List

This section represents a list of client groups created within the system.

Screenshot: Client Groups section main window

Name	Reseller	Notes
Customers	all resellers	
Orange_group	orange	
Vendors	all resellers	

Adding New Client Group

To create a new client group click the "New Group" button, enter a name and fill other fields.

Screenshot: Client Group "New Group" window

Type: **General**

Name:

Reseller: all resellers

Invoice Notes:

OK Cancel Apply

Field	Description
Name	A group name. Mandatory field.

Reseller	Specify a Reseller for this group
Invoice Notes	Additional text which will be added to all invoices, issued to clients of current group

Account Groups List

This section displays a list of created originator/terminator groups for further using them in *Accounting and Dynamic Routing*:

Screenshot: Originator Groups section main window

Name	Reseller	Notes
origination group 1	all resellers	
origination group 2	all resellers	

Screenshot: Terminator Groups section main window

Name	Reseller	Notes
Premium termination group	all resellers	
Wholesale	all resellers	

Adding New Account Group

You can add new originator/terminator group by clicking the *"New Group"* button. Then fill all needed fields in the pop-up window.

Screenshot: Originator Group "New Group" window

New Group

Type: **Orig Traffic**

Name:

Reseller: **all resellers**

Notes:

OK **Cancel** **Apply**

Screenshot: Terminator Group "New Group" window

New Group

Type: **Term Traffic**

Name:

Reseller: all resellers

Notes:

OK Cancel Apply

Field	Description
Name	A group name. Mandatory field.
Reseller	Specify a reseller for this group.
Notes	Additional information about a group.

DID Groups List

This section displays a list of created DID groups for using them in *Retail Module*:

Screenshot: *DID Groups section main window*

Name	Reseller	Notes
DID-1	all resellers	
DID-2	all resellers	
General DIDs	all resellers	
Gold numbers	all resellers	

Adding New DID Group

For adding a new DID group you should click the *"New Group" button*. Then fill all required fields in the *"New Group" window*.

Screenshot: *DID Group "New Group" window*

New Group

Type: **DID Group**

Name:

Reseller: all resellers

Hold Days: 1

Notes:

OK Cancel Apply

Field	Description
Name	A group name.
Reseller	Specify a reseller for a group.
Hold Days	Specify the number of days till the deactivation of DID assigned package.
Notes	Additional information about a group.

Rate Groups List

This section displays a list of created Rate groups for using them in *Rate Tables*:

Screenshot: Rate Groups section main window

Name	Reseller	Notes
InterLATA-InterState	all resellers	Between different LATAs, between different states
InterLATA-IntraState	all resellers	Between different LATAs, within same state
IntraLATA-InterState	all resellers	Within same LATA, between different states
IntraLATA-IntraState	all resellers	Within same LATA, within same state

Adding New Rate Group

You can add new Rate group by clicking the *"New Group"* button. Then fill all needed fields in the pop-up window.

Screenshot: Rate Group "New Group" window

New Group

Type: **Rate Group**

Name:

Reseller: all resellers

Notes:

OK Cancel Apply

Field	Description
Name	A group name
Reseller	Specify a reseller for this group
Notes	Additional information about a group

VoIP Host Groups List

This section shows a list of created VoIP host groups. It allows to group data in reports and invoices by VoIP host groups.

Screenshot: VoIP Host Groups section main window

Name	Reseller	Notes
Group A	all resellers	
Group B	all resellers	

Field	Description
Name	The name of respective group
Reseller	The reseller for a respective group
Notes	Additional information about a group

Knowledge Base Articles

- [How to route by SRC Number / Orig Group?](#)
- [How to set calls to come from one specific originator?](#)
- [How to exclude specific vendor from Dynamic Routing?](#)

Invoices Templates

On this page

- [Invoices Templates List](#)
- [Creating New Invoice Template](#)

Invoices Templates List

This tool allows you to create your own invoice templates, for use in different circumstances, for example, if you own few companies, and each company requires its own customized invoice.

To use this feature you need to access *Configuration – Invoices Templates* section and proceed with browsing default templates or creating a new one (Screenshot).

Screenshot: *Invoices Templates* section main window

ID	Name	Type	Reseller	Notes
1	default	PDF	any reseller	default invoice template
5	default extended	PDF	any reseller	
2	estonian	PDF	any reseller	estonian default template

Creating New Invoice Template

When creating new template, first thing you must choose is the type of a template. Currently there are two types – *xls* and *pdf*. For creating new template press respective button: "New PDF Template" or "New XLS Template". If *xls* type is selected, you can only select which fields you would like to see in invoice, as the positioning of all items are predefined (Screenshot).

Screenshot: *Creating an invoice XLS template*

New Template

Name:

Reseller:

Anonymized Codes:

Attach CDRs list to the invoice

Notes:

EXCEL TEMPLATE PARAMETERS

Statistics Columns:

Include packages charges to invoice

Template:

OK Cancel Apply

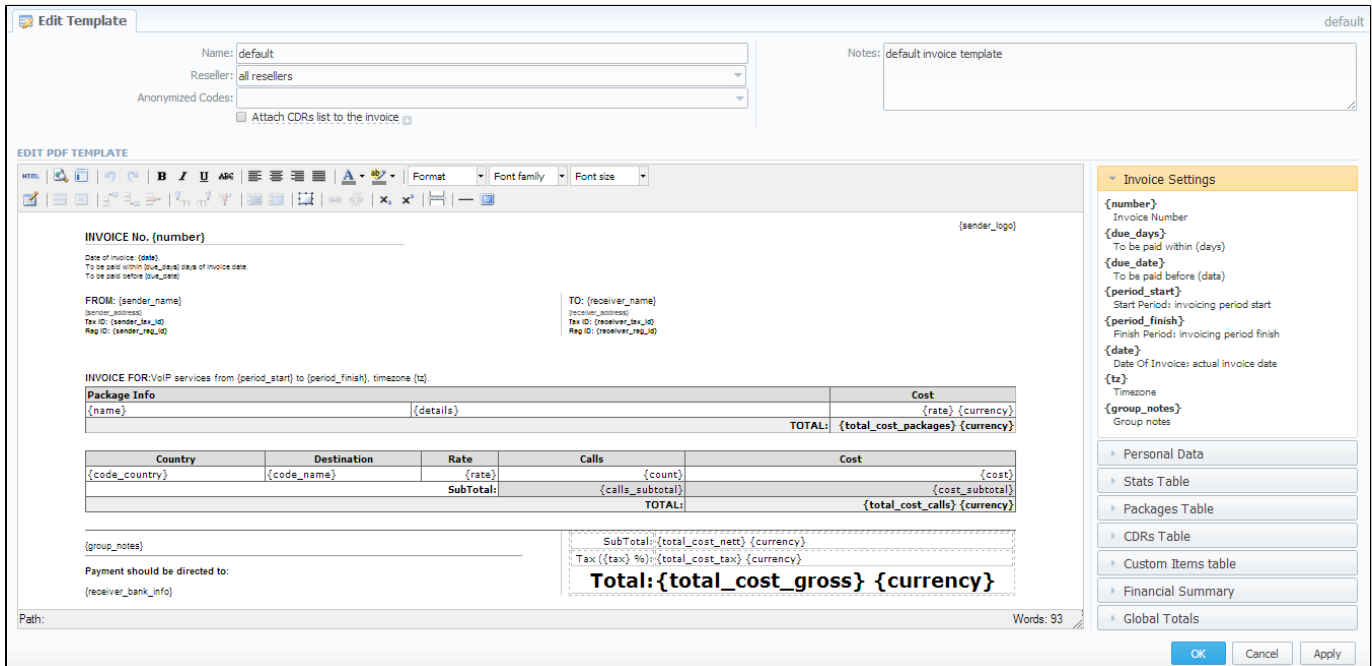
In the following table you will find descriptions of all fields of this form:

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"> "Attach CDRs list to the invoice" checkbox 	If enabled, creates CDR file for invoicing period and attaches it to invoice
	<ul style="list-style-type: none"> CDRs List Format 	List of CDR file format (csv or xls)
	<ul style="list-style-type: none"> Select Columns 	List of columns which can be presented in attached CDR file
	<ul style="list-style-type: none"> Notes 	Additional information concerning the invoice template
Excel Template Parameters	Settings of invoice template	
	<ul style="list-style-type: none"> Statistics Columns 	List of statistics columns. If selected, the invoice will include summary statistics with selected columns
	<ul style="list-style-type: none"> "Include packages changes to invoice" checkbox 	If enabled, invoice will include data on ordered packages for selected period
	<ul style="list-style-type: none"> Template 	Defined displaying format of CDRs list in a template

If pdf template is selected, you will see the interface similar to one of the popular text processors (Screenshot).

Screenshot: Creating an invoice PDF template



The whole process 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*.



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*.

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 Maximize button next to the name of respective section.

Screenshot: Adding new VoIP Gateway

GENERAL INFORMATION

Name:

IP Address:

LNP Provider:

Allowed For:

FILES DOWNLOADER

Type: Port:

Login: Password:

From path:

FILES COLLECTOR

Collector Type:

RADIUS SERVER

Overwrite TZ:

- Track active calls
- Skip Zero Calls
- Skip Released Calls
- Collect Accounting Data

TRAFFIC PROCESSING

+ add rule

Origin	Code	Code Name	Src Match	Src Replace	Dst Match	Dst Replace	Add Orig Group	Order
Orig-Ten								1

Code deck:

OK Cancel Apply

Section	Fields And Descriptions
General Information	General gateway and calls processing information
	<ul style="list-style-type: none"> • Name VoIP gateway name
	<ul style="list-style-type: none"> • IP Address VoIP gateway IP-adress

	<ul style="list-style-type: none"> • LNP Provider 	Specify here a LNP provider
	<ul style="list-style-type: none"> • Allowed For 	Specify here, which resellers can use current VoIP gateway
	<ul style="list-style-type: none"> • Ident Priority 	Set the priority of account identification
	<ul style="list-style-type: none"> • ORIG ANI Ident 	Sets originating calls ANI identification (options available: SRC number ext, SRC number bill, DST ext, DST number bill)
	<ul style="list-style-type: none"> • TERM ANI Ident 	Sets 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 	Activates / deactivates originating calls processing by full phone number in statistics
	<ul style="list-style-type: none"> • "Rate TERM calls by DstOut number" check box 	Activates / deactivates terminating calls processing by full phone number in statistics
	<ul style="list-style-type: none"> • "Rate calls only with "success" status" check box 	Activates/deactivates processing of calls that have "success" end code only
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
	<ul style="list-style-type: none"> • Overwrite TZ 	Timezone selection (if you select a different timezone, system will ignore a timezone information stored in CDRs-file and use current value)
	<ul style="list-style-type: none"> • "Skip Zero Calls" check box 	Activates / deactivates zero duration calls ignoring

	<ul style="list-style-type: none"> • "Skip Released Calls" check box 	Activates/deactivates released calls ignoring
RADIUS Server	RADIUS Collectors 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
	<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)
	<ul style="list-style-type: none"> • "Track Active Calls" Check box 	Enables the display of active calls in <i>Active Calls</i> section
	<ul style="list-style-type: none"> • "Skip Zero Calls" check box 	Activates / deactivates zero duration calls ignoring
	<ul style="list-style-type: none"> • "Skip Released Calls" check box 	Activates/deactivates released calls ignoring
	<ul style="list-style-type: none"> • "Collect Accounting Data" check box 	<p>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></p> <p>If enabled, information from STOP packets will be collected by database</p>
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
Traffic Processing	Here you can set number translation rules that will be executing for all calls processed by current gateway	
	<ul style="list-style-type: none"> • Code Deck 	Specify the code deck that will be used to pick codes and destination names for Mobile Number Portability feature. By browsing information from selected code, VCS will be able to perform appropriate number translations, which are processed by current VoIP gateway.

Files Downloading History

You can view files downloading history by going to the *"Downloads History"* section.

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. 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:	https://staging-1.ix.jerasoft.net/	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:	7	For Calling Cards only — default length of PIN code for generated cards

MAIL SERVER SETTINGS

Host:	localhost	Hostname or IP address of SMTP server
Port:	25 Plain	Port/Security of SMTP server
From:	billbery@localhost	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:	%Y-%m-%d	Output format for dates, you can check syntax for this field in the User Manual
Datetime Format:	%Y-%m-%d %H:%M:%S %z	Output format for datetimes, you can check syntax for this field in the User Manual
Items Per Page:	50	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, Code Removed, De	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:	5	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:	%Y_%m_%d_%C (%N) %x %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:	1286	Last Invoice No used in system for generation of invoices
Autoinvoicing Default State:	to send	Default state for all automatically created invoices.
Default invoice fields:		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.
CDR fields for invoices:		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. empty - bind to all
Accounting port:	1813	Listen for accounting packets on specified port
Authorization port:	1812	Listen for authorization packets on specified port, same for dynamic routing if available
Number of workers:	2	Number of threads that process packets. The value of this parameter also affects on

Max call length:	<input type="text" value="7200"/>	numbers of SIP workers. 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:	<input type="text" value="5060"/>	Listen for auth packets on specified port.
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DYNAMIC ROUTING

Analyze Period:	<input 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)

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 checked="" type="checkbox"/> Event on zero time calls		Send events even if call has zero length
Resend low-balance events every:	<input type="text" value="6"/> hour(s)	How often to resend e-mail regarding low customer's balance
Rate changes notification period:	<input type="text" value="0"/> 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="400"/> day(s)	Customer will be informed about rates for next X days.
Watch for free space at:	<input type="text" value="/usr/local:99;/var/lib/pgsql:99;/var/log"/>	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="2"/>	Sends all messages from one worker in single e-mail, if message count is larger than 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 rotate delay:	<input type="text" value="0"/> 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 DID's history from log after:	<input type="text" value="89"/> day(s) (from 1 to 90)	Delete DID's history from DID's 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.
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="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"/> Select which currency is the default one, it will be used for generation of routing tables and matching of profitability margin.
Domain name:	<input type="text" value="http://"/> Domain name field (It should always start with "https://" and should not be empty!)
Default language:	<input type="text" value="English"/> Choose which language will be selected by default on login screen
Timezone:	<input type="text" value="UTC"/> Default system timezone, you can change timezone in statistic reports queries
Statistics processing order:	<input type="text" value="new calls first"/> Order of statistics processing when the queue is large
Re-rating mode:	<input type="text" value="actual"/> 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
Calculator workers:	<input type="text" value="1"/> Number of threads processing calculator tasks (number of CPU cores / 2).
Calculator mode:	<input type="text" value="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:	<input type="text" value="12"/> For Calling Cards only — default length of PIN code for generated cards

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
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.

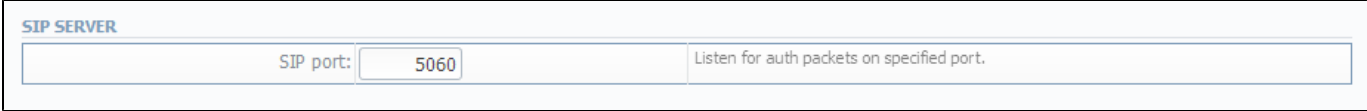
Changes will be only applied after you restart RADIUS server from Task Scheduler section)

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 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 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 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 months 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

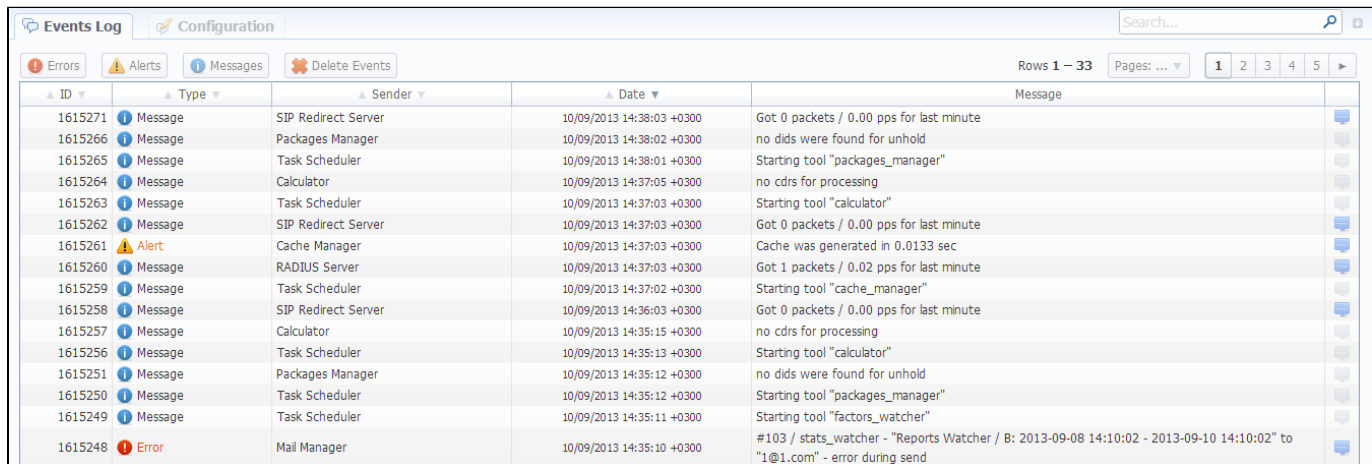
On this page

- [Events Log Section Main Window](#)
- [Configuration Section Tab](#)

Events Log Section Main Window




The logs record events that happen on the system. Examining the events in these logs can help to trace activities, errors and alert notifications. This section displays the list of all events recorded by the system.

Screenshot: *Events Log section main window*



ID	Type	Sender	Date	Message
1615271	Message	SIP Redirect Server	10/09/2013 14:38:03 +0300	Got 0 packets / 0.00 pps for last minute
1615266	Message	Packages Manager	10/09/2013 14:38:02 +0300	no dids were found for unhold
1615265	Message	Task Scheduler	10/09/2013 14:38:01 +0300	Starting tool "packages_manager"
1615264	Message	Calculator	10/09/2013 14:37:05 +0300	no cdrs for processing
1615263	Message	Task Scheduler	10/09/2013 14:37:03 +0300	Starting tool "calculator"
1615262	Message	SIP Redirect Server	10/09/2013 14:37:03 +0300	Got 0 packets / 0.00 pps for last minute
1615261	Alert	Cache Manager	10/09/2013 14:37:03 +0300	Cache was generated in 0.0133 sec
1615260	Message	RADIUS Server	10/09/2013 14:37:03 +0300	Got 1 packets / 0.02 pps for last minute
1615259	Message	Task Scheduler	10/09/2013 14:37:02 +0300	Starting tool "cache_manager"
1615258	Message	SIP Redirect Server	10/09/2013 14:36:03 +0300	Got 0 packets / 0.00 pps for last minute
1615257	Message	Calculator	10/09/2013 14:35:15 +0300	no cdrs for processing
1615256	Message	Task Scheduler	10/09/2013 14:35:13 +0300	Starting tool "calculator"
1615251	Message	Packages Manager	10/09/2013 14:35:12 +0300	no dids were found for unhold
1615250	Message	Task Scheduler	10/09/2013 14:35:12 +0300	Starting tool "packages_manager"
1615249	Message	Task Scheduler	10/09/2013 14:35:11 +0300	Starting tool "factors_watcher"
1615248	Error	Mail Manager	10/09/2013 14:35:10 +0300	#103 / stats_watcher - "Reports Watcher / B: 2013-09-08 14:10:02 - 2013-09-10 14:10:02" to "1@1.com" - error during send

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:

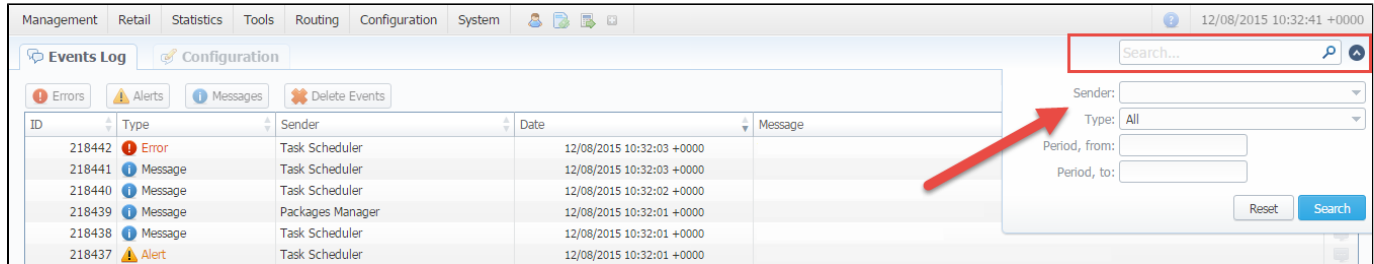
- incoming or outgoing call client is not registered within the system;
- phone number prefix is not registered within system;
- incoming call price is more than outgoing call price;
- incoming or outgoing call was rejected;
- etc.

 **Warning!** When you press "Delete Events" button, all events that satisfy current search query will be deleted from the system!

You can find the build-in **Search panel** that provides an easy way of searching against multiple rows. Click the **Search icon** in the respective toolbar



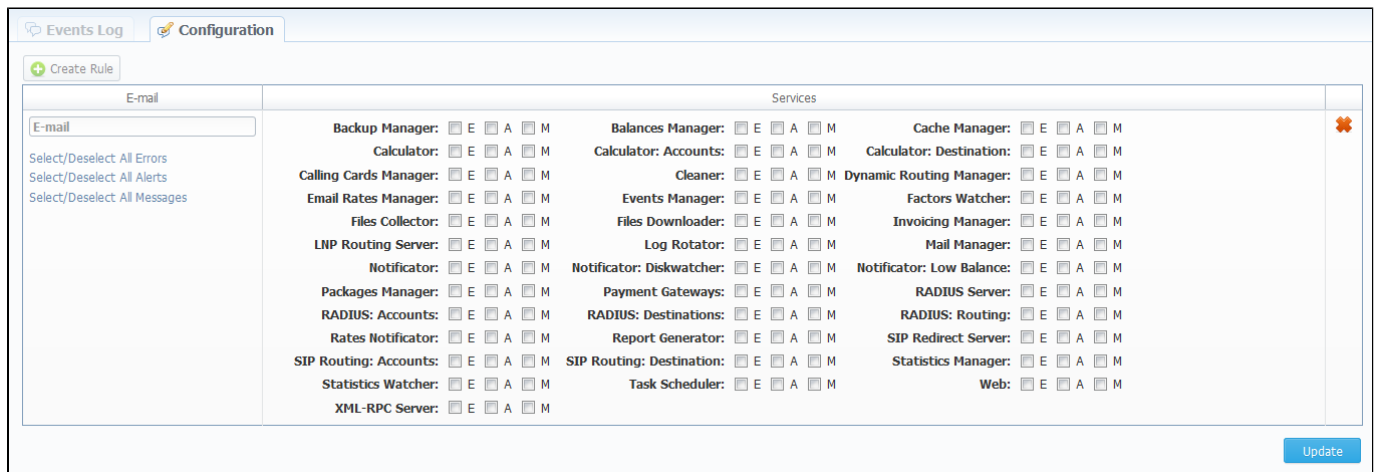
Screenshot: Events Log section/ Search panel



Configuration Section Tab

This section is used to inform system's users about all recorded events. Main window is displayed on Screenshot:

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 pressing "Create Rule" button. You can confirm current configuration of events by pressing "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* (Screenshot):

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: 13 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 (Screenshot below) 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 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 case when a client, reseller etc. was fully deleted, there is a possibility to see state of this object at the time of its removal, so called *Historic State*, by clicking on its name in *Item column* respectively (Screenshot).

Screenshot: Historic State window

SYSTEM INFORMATION

Name: test_client
Reseller: RESELLER A
Currency: DKK
Timezone: default (UTC)
Status: Deleted
Groups:
Tax Profile:
Bill Calls by: disconnect time
 Hidden Numbers

CLIENT PANEL

Login:
Password:
Access: Client Info x Rates List x
Balance Refill x
Balance Report x
Summary Report x CDRs List x
Change Password x

TERMINATOR SETTINGS

Rate Table:
Capacity: channels

ORIGINATOR SETTINGS

Allowed Credit: 0 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: Excel CSV
Notify type: All rates

COMPANY INFO

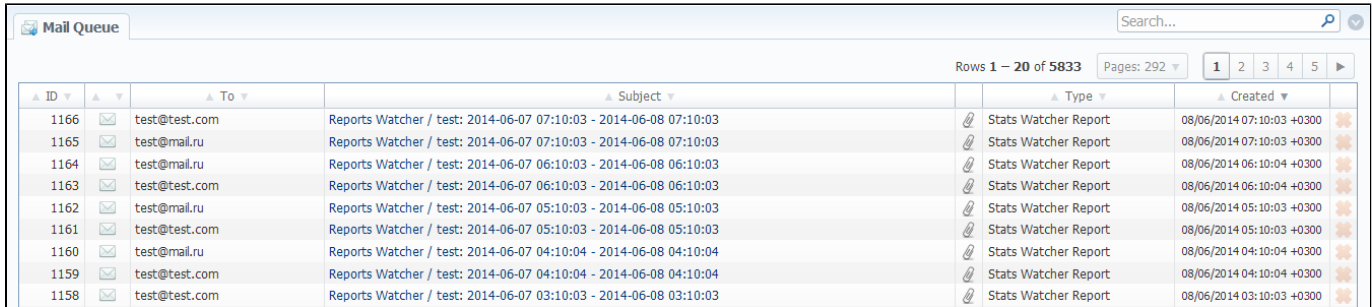
Name: test
Main E-mail:
NOC E-mail: test@jft.net
Billing E-mail: test@jft.net
Rates E-mail: test@jft.net
Address:
Tax ID:
Reg ID:
Account Details:
Locale:

Close

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 Screenshot:

Screenshot: Mail Queue section main window



The screenshot shows a web interface for the Mail Queue section. At the top, there is a search bar and a navigation bar with page numbers 1, 2, 3, 4, 5. Below the navigation bar is a table with columns for ID, To, Subject, Type, and Created. The table contains 10 rows of data, each representing an email record. The subject of each email is a report generated by the Reports Watcher, and the type is a Stats Watcher Report. The created date and time are also listed for each record.

ID	To	Subject	Type	Created
1166	test@test.com	Reports Watcher / test: 2014-06-07 07:10:03 - 2014-06-08 07:10:03	Stats Watcher Report	08/06/2014 07:10:03 +0300
1165	test@mail.ru	Reports Watcher / test: 2014-06-07 07:10:03 - 2014-06-08 07:10:03	Stats Watcher Report	08/06/2014 07:10:03 +0300
1164	test@mail.ru	Reports Watcher / test: 2014-06-07 06:10:03 - 2014-06-08 06:10:03	Stats Watcher Report	08/06/2014 06:10:04 +0300
1163	test@test.com	Reports Watcher / test: 2014-06-07 06:10:03 - 2014-06-08 06:10:03	Stats Watcher Report	08/06/2014 06:10:04 +0300
1162	test@mail.ru	Reports Watcher / test: 2014-06-07 05:10:03 - 2014-06-08 05:10:03	Stats Watcher Report	08/06/2014 05:10:03 +0300
1161	test@test.com	Reports Watcher / test: 2014-06-07 05:10:03 - 2014-06-08 05:10:03	Stats Watcher Report	08/06/2014 05:10:03 +0300
1160	test@mail.ru	Reports Watcher / test: 2014-06-07 04:10:04 - 2014-06-08 04:10:04	Stats Watcher Report	08/06/2014 04:10:04 +0300
1159	test@test.com	Reports Watcher / test: 2014-06-07 04:10:04 - 2014-06-08 04:10:04	Stats Watcher Report	08/06/2014 04:10:04 +0300
1158	test@test.com	Reports Watcher / test: 2014-06-07 03:10:03 - 2014-06-08 03:10:03	Stats Watcher Report	08/06/2014 03:10:03 +0300

These can be invoices, low balance notifications or other types of messages system sends in form of e-mails.

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* (Screenshot):

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:demo:system_status/info: [REDACTED]	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 (Screenshot):

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)
Notificator	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 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 a API request, this client will be actually deleted from the system or modified.

Screenshot: API Testbed

The screenshot shows the API Testbed interface with the following fields and values:

- API SERVER:** JSON-RPC URL: [Empty]
- API METHOD:** Module: Management / Clients, Action: list
- AUTHENTICATION:** Login: admin, Password: [Empty]
- PARAMETERS:** [Empty JSON object: {}]
- Buttons:** Send Request

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 displays the JSON trees for the API request and response:

```
API REQUEST
{
  jsonrpc: "2.0",
  method: "clients.didsList",
  - params: {
    - auth: {
      login: "admin",
      password: " "
    }
  },
  id: "api-testbed"
}

API RESPONSE
{
  jsonrpc: "2.0",
  id: "api-testbed",
  - result: {
    code: false,
    session_id: "1-dkh1vhdb5p05f9euuuptekbe1",
    - messages: [
      + { ... }
    ],
    return: {},
    errors: []
  }
}
```

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	all companies	Administrator	04/03/2011 13:23:52 +0300 IP: [redacted]		
	Admin-JeraSoft	all companies	Administrator	16/04/2015 11:38:21 +0300 IP: [redacted]		
	[redacted]	[redacted]	Administrator	never logged in yet		
	[redacted]	all companies	[redacted]	23/04/2015 07:14:43 +0300 IP: [redacted]		
	[redacted]	[redacted]	[redacted]	never logged in yet		
	jerasupport	all companies	JeraSoft Support	27/04/2015 20:22:52 +0300 IP: [redacted]		
	max	all companies	[redacted]	04/03/2014 23:21:55 +0300 IP: [redacted]		
	_system	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 " <i>Full name</i> " is a mailto link displayed in " <i>Users</i> " 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: Each user can have only one assigned role for.

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 (Screenshot):

Screenshot: Roles section main window



The screenshot shows a web interface for managing roles. At the top, there is a search bar and a 'New Role' button. Below this is a table with a header 'Name' and a column for access rights. The table contains six rows of roles, each with a corresponding access right icon (a red 'X').

Name	Access Rights
Accounting	✘
Administrator	✘
Call Shop Manager	✘
Call Shop Operator	✘
Monitoring	✘
Resellers	✘

Adding New Role

To add a new role, press "New Role" button.

In window that opens (Screenshot below), enter new role's name and select respective access rights for sections in *Access Permissions* table.

"Default Module" field specifies a default section, that will be displayed when you login into system.

Screenshot: Adding new role window

 **New Role**


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 checked="" type="checkbox"/> Full Delete		<input type="checkbox"/> Read	<input type="checkbox"/> Write
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"/> Execute	<input type="checkbox"/> Read	<input type="checkbox"/> Write
Management / Balance Report			<input type="checkbox"/> Execute		
Management / Resellers		<input checked="" type="checkbox"/> Full Delete		<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
Retail / Packages				<input type="checkbox"/> Read	<input type="checkbox"/> Write
Retail / DID Management				<input type="checkbox"/> Read	<input type="checkbox"/> Write
Statistics / Dashboard			<input type="checkbox"/> Execute		
Statistics / Summary Report	<input type="checkbox"/> Billing data		<input type="checkbox"/> Execute		
Statistics / Orig-Term Report	<input type="checkbox"/> Billing data		<input type="checkbox"/> Execute		
Statistics / Profit Report			<input type="checkbox"/> Execute		
Statistics / LCR Lists			<input type="checkbox"/> Execute		
Statistics / CDRs List			<input type="checkbox"/> Execute		
Statistics / Mismatches Report			<input type="checkbox"/> Execute		
Statistics / Calls Rerating			<input type="checkbox"/> Execute		
Statistics / Reports to E-mail			<input type="checkbox"/> Execute	<input type="checkbox"/> Read	
Statistics / Archive Management				<input type="checkbox"/> Read	<input type="checkbox"/> Write
Tools / Rates Analysis			<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 / CDRs 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"/> 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 / Users				<input type="checkbox"/> Read	<input type="checkbox"/> Write
System / Roles				<input type="checkbox"/> Read	<input type="checkbox"/> Write
System / About System				<input type="checkbox"/> Read	
System / Get Support			<input type="checkbox"/> Execute		
System / Change Password			<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 3 preinstalled 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 available to Administrator only;
- **Resellers** – has access permissions to productively work with its clients. Also doesn't have access to technical settings and some statistic info that is available to Administrator only (use this role when adding Reseller or Agent user).

 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.

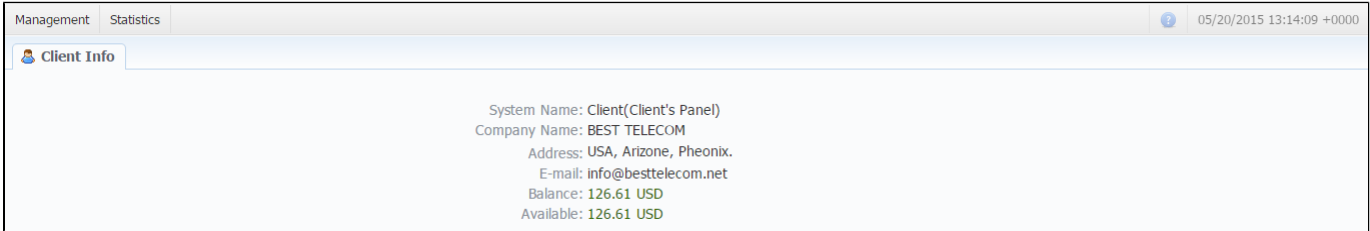
Knowledge Base Articles

- [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.

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.

<action>	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
--path=<path>	Specify the VCS location. Only if different from <i>/usr/local/vcs</i> .
--user=<user>	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/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	<code>clients.editForm</code>
Arguments	List of arguments for the method call	<code>id_clients = 11</code> <code>auth[login] = admin</code> <code>auth[password] = password</code>

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	<pre>[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 ...)</pre>
session_id	Session ID which may be used to speed up next calls	1-dsglnqr4qnsdih8djj6da7qr4
messages	List of success / warning messages returned by message	<code>array()</code>
errors	List of abnormal errors if they fired during processing	<code>array()</code>

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.