JeraSoft Billing

JeraSoft Billing 3.5

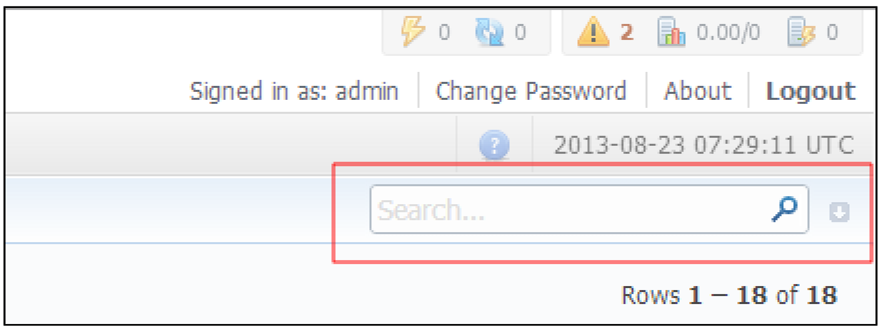
Interface Basics

On this page

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.:

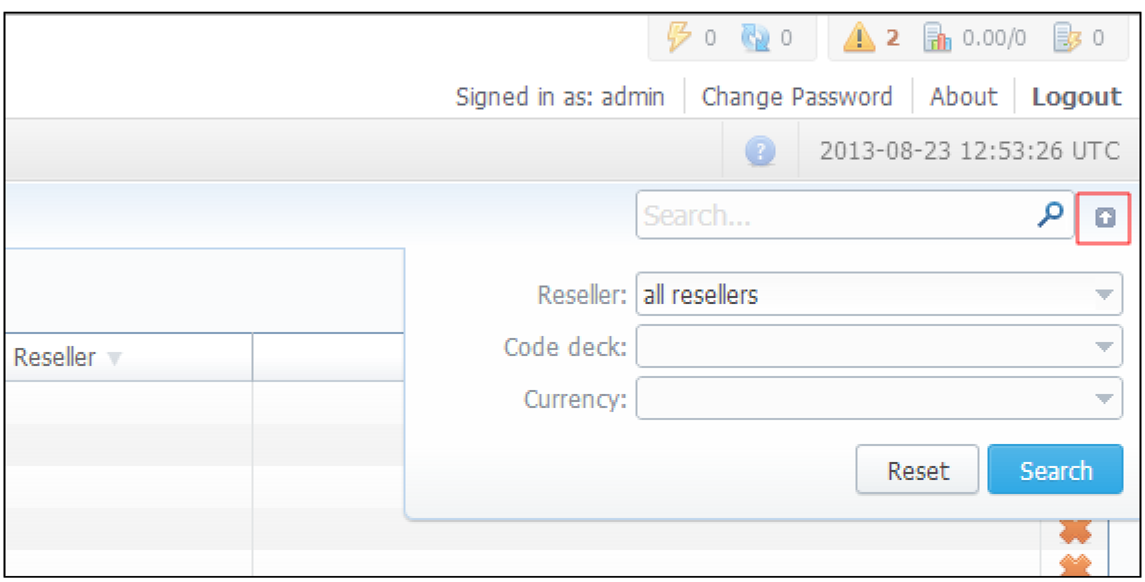
Screenshot: Quick Search panel



> **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

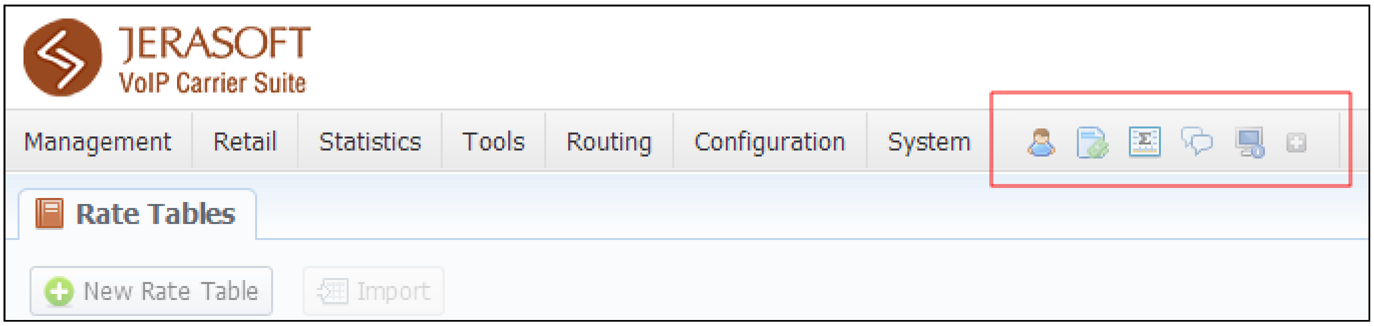


> **Note:** If the arrow button has red color, this means that search is performed on selected parameters.

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

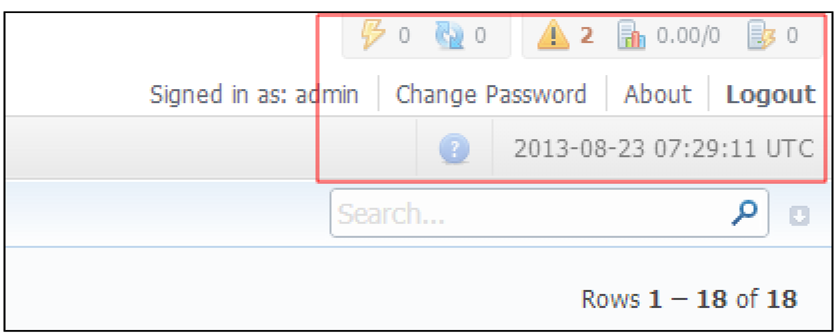


To add a shortcut of any section to SmartBar, press "+" button near section's name. To remove the shortcut, press "-" button at same location.

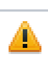
InfoBar

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:

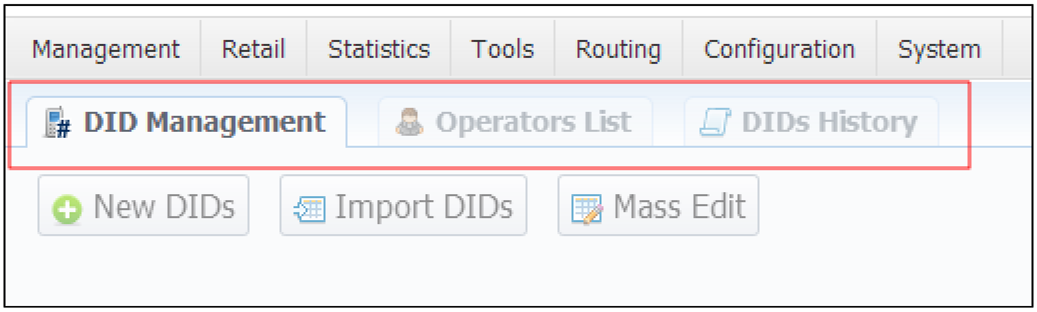
Icon	Description
	CDR queue
	CDRs in queue for rerating
	Information about system alerts

	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 (Screenshot below). This feature is designed to make your work with this sections much more easier and comfortable.

Screenshot: Section Tabs



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
- Rate Tables
- Invoices
- Transactions
- Balance Report
- Resellers

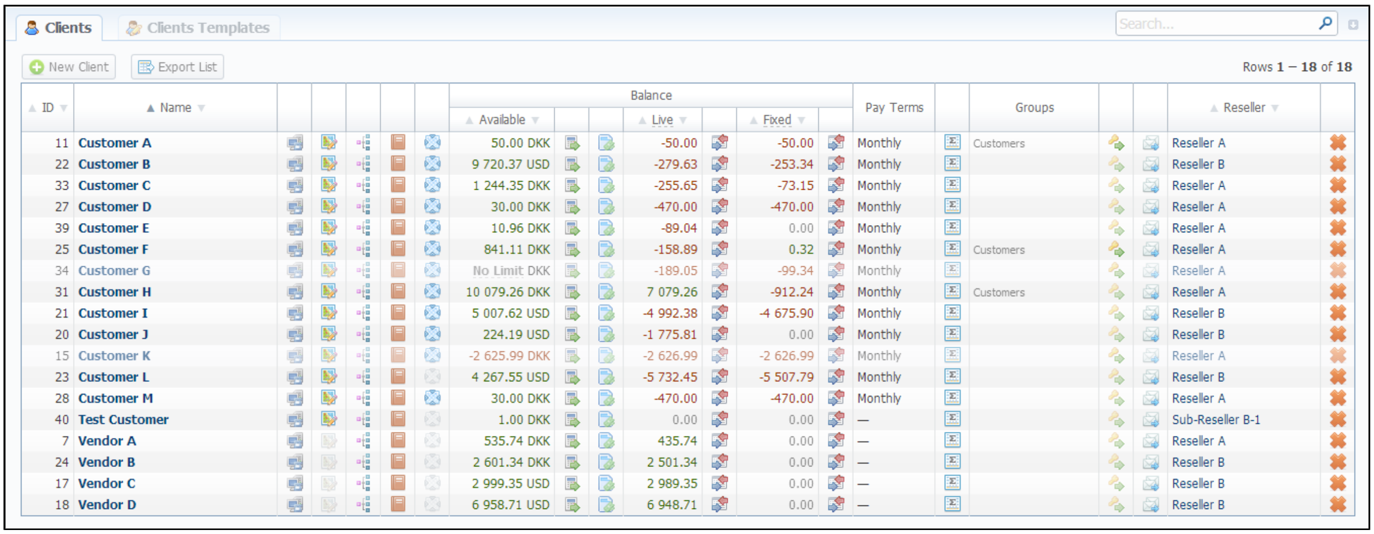
Clients

On this page

Clients Section Main Window

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



<table>
<tr><th>Column Name</th><th colspan="2">Description</th></tr>
<tr><td>ID</td><td colspan="2">Client's identification number</td></tr>
<tr><td>Name</td><td colspan="2">Client's name</td></tr>
<tr><td rowspan="4">Balance</td><td colspan="2">Client's balance values</td></tr>
<tr><td>• Available</td><td>"Live" client's balance including allowed credit</td></tr>
<tr><td>• Live</td><td>Client's balance calculated on basis of performed payments and processed calls</td></tr>
<tr><td>• Fixed</td><td>Client's balance calculated on basis of the outstanding invoices and performed payments</td></tr>
<tr><td>Pay Terms</td><td colspan="2">Payment terms of each client</td></tr>
<tr><td>Groups</td><td colspan="2">Indicates, which group respective client belongs to</td></tr>
<tr><td>Reseller</td><td colspan="2">Name of reseller company respective client belongs to</td></tr>
</table>

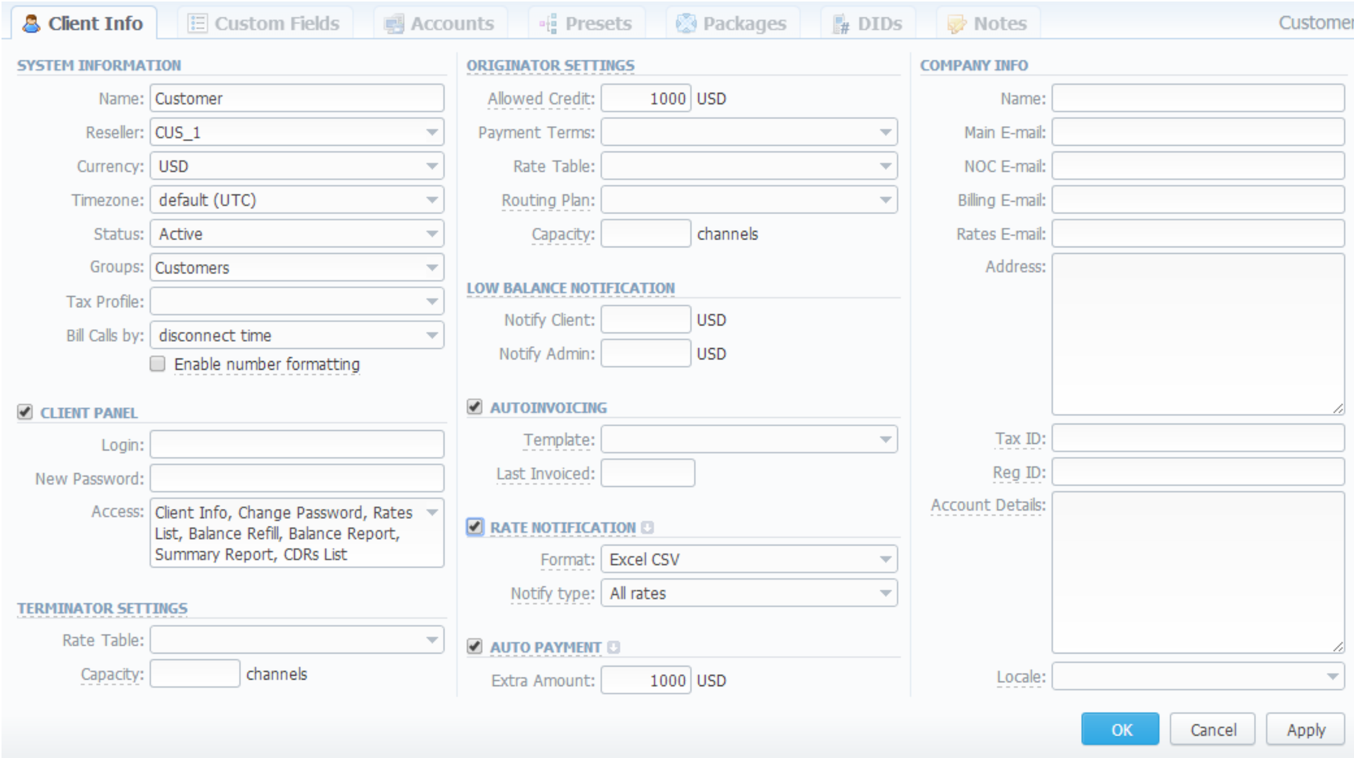
Icon	Description
	Is used to edit accounts (gateways, sip-accounts etc.)
	Is used for accessing client's current routing plan (icon will be colored if plan is assigned)
	Is used to add additional configurations to dynamic routing for current client
	Is used to display client's rates
	• ***ORIG*** — Rate tables for incoming calls
	• ***TERM*** — Rate tables for outgoing calls
	Is used to to assign and manage your packages
	Is used to manage client's balance. It's a shortcut to *Transactions* section
	Is used to manage client's invoices. It's a shortcut to *Invoices* section
	Is used to manage client's balance report (Live or Fixed). It's a shortcut to *Balance Report* section
	Is used to manage client's summary report. It's a shortcut to *Summary Report* section
	Allows access to current client's client control panel (icon will be colored if access is available for customer)
	Is used to view sends history. It's a shortcut to *Mail Queue* 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.*

Adding New Client

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

Screenshot: Adding new client



Fill next fields:

Section	Fields Description	
System Information	General information about client	
	• ***Name***	A client's name
	• ***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)
	• ***Currency***	Preferred currency (will be used in invoices)
	• ***Timezone***	Specify the timezone (will be used in invoices)
	• ***Status***	Current client status
	• ***Groups***	You can specify a group to which current client will belong to (only available if current user has necessary role installed. Refers to *Client Groups* section)
	• ***Tax Profile***	You can specify a tax profile which will be reflected in invoices (refers to *Taxes Profiles* section)
	• ***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)

	• ***"Enable number formatting" checkbox***	Allows you to hide some numbers from calls made by this client
“Client Panel Access” checkbox		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 following link: http://vcs_address/clients/ Sections that are available to clients within that control panel can be turned on or off by respective checkboxes. Full list of available sections is the following: Client Info, Invoices, Rates List, Summary Report, CDRs List, Balance Report, Payment Gateways, Change Password **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 list of available fields and following parameters
	• ***Login***	Client's login
	• ***New password***	Client's password
Originator Settings		Settings for your customers, who send calls to your switch. Current clients' billing settings are specified here
	• ***Mode***	Sets the balance check when *Radius Authorization* is used. The check is on when *“Prepaid”* is selected, and off when *“Postpaid”* is
	• ***Allowed Credit***	Credit limit
	• ***Payment Terms***	Select the payment terms template
	• ***Rate table***	Select the origination rate table
	• ***Routing Plan***	Select appropriate routing plan that will be used to route all calls of this customer (but it may be overriden for any of customer's accounts in *Accounts* tab)
	• ***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
	• ***Rate table***	Select the termination rate table
	• ***Capacity***	Summary termination capacity for this client
Low Balance Notifications		Here you can setup whether system should make low balance notifications or not
	• ***Notify Client***	When clients' balance+credit is below entered value, system will send a notification to clients' *Billing e-mail*
	• ***Notify Admin***	When clients' balance+credit is below entered value, system will send a notification to administrator via *Events Log*
“**Autoinvoicing” checkbox**		Activates/deactivates the automatic invoice generation feature for current client. It can be configured with parameters
	• ***Template***	Select an invoice template for this customer
	• ***Last Invoiced***	Specify last day, that the client has already been invoiced for

"Rate Notification" checkbox	Here you can enable or disable automatic rates notification for current client	
	• ***Format***	Select desirable format of rate notification (XLS or CSV)
	• ***Notify Type***	Specify a type of notification *All rates* - full price list *Only changed rates* - only changed rates will be send *All rates - unique mode* - if there two or more new rates with different effective date 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" checkbox	Here you can enable or disable auto payment	
	• ***Extra Amount***	Specify an amount that will be applied to customer's credit card registered in Authorized.net payment service
Company Info	Some additional information about client can be entered here	
	• ***Name***	Company name
	• ***Main E-mail***	Company e-mail for general inquiries
	• ***NOC E-mail***	Company email for technical related questions
	• ***Billing E-mail***	Automatically generated invoices and notifications will be sent on this e-mail address
	• ***Rates E-mail***	Company e-mail for rates related questions
	• ***Address***	Physical company address
	• ***Tax ID***	Customer's tax ID
	• ***Reg ID***	Customer's registration ID
	• ***Account Details***	Reference information about client's bank account or payment details
	• ***Locale***	Preferred locale, that will be sent as reply to RADIUS Authorization. It is used for IVR platforms to predefine language

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.

Custom Fields

This tab allows you to manage client's custom fields, which can be used in invoice template as custom functions. This tab only displays already added and assigned fields to respective customer. These fields themselves are added in *Management – Resellers* section.

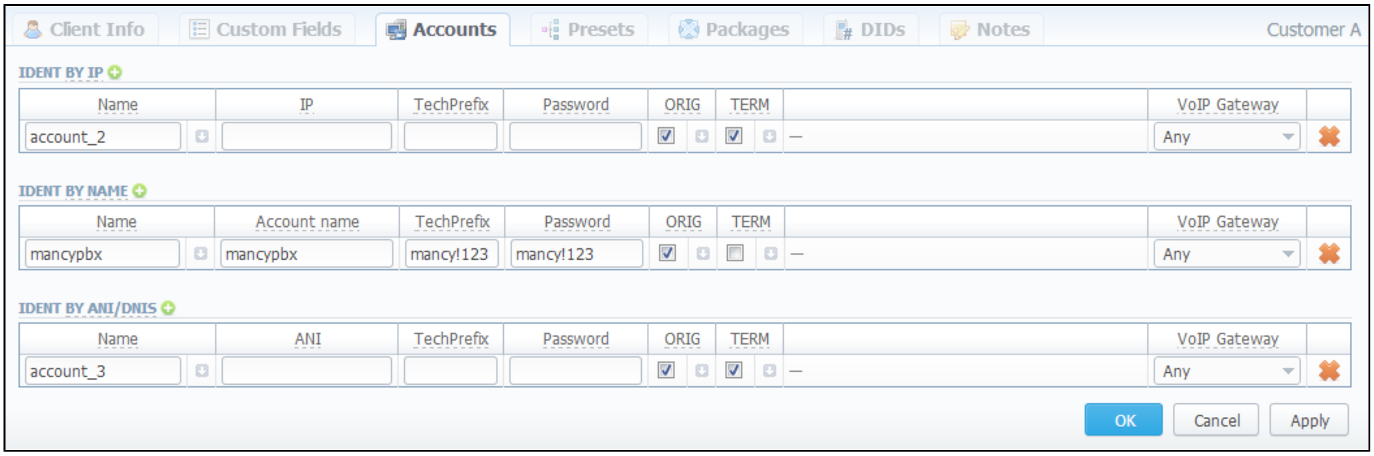
Accounts Configuration

On this page

Accounts Configuration

By pressing button , an account configuration dialog-window will show up:

Screenshot: Accounts configuration



VCS system allows client identification in 3 different ways:

- **Ident by IP** – identification by gateway IP-adress;
- **Ident by Name** – identification by user login or gateway name;
- **Ident by ANI/DNIS** – identification by src or dst number.

Adding New Account

To add new account press button in respective section, fill next fields and press “”:

Field Name	Field Description
Name	Name of an account in JeraSoft VCS system
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"
Account Name	Gateway name or user login, that is used for identification
ANI	Called or caller phone number
Tech Prefix	Technical prefix, that is used to identify users, when multiple clients use same gateway
Password	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
ORIG	Allow origination from this gateway

<table>
<tr><td>TERM</td><td colspan="2">Allow termination to this gateway</td></tr>
<tr><td>VoIP Gateway</td><td colspan="2">Current account will be in use only when billing this host calls</td></tr>
<tr><td rowspan="8">Extra fields</td><td colspan="2">A number of additional settings. You can see them by pressing button in "ORIG" and "TERM" fields</td></tr>
<tr><td>• Capacity</td><td>Set capacity for respective traffic direction</td></tr>
<tr><td>• Rate Table</td><td>Select rate table for current account (it will have higher priority than rate table set for whole client) either for origination or termination side</td></tr>
<tr><td>• Routing Plan</td><td>You can specify custom routing plan for origination from this account</td></tr>
<tr><td>• Protocol</td><td>Select respective protocol for current termination gateway</td></tr>
<tr><td>• Proxy</td><td>Specify proxy for current termination gateway</td></tr>
<tr><td>• Port</td><td>Specify port for current termination gateway</td></tr>
<tr><td>• Groups</td><td>Set routing groups where current termination or origination account will belong to. Then, in Routing Plans section you will be able to route directly to one of these termination groups or allow routing only for these origination groups. Please consult Routing Details section for more information</td></tr>
</table>

You can add unlimited number of accounts for each client.

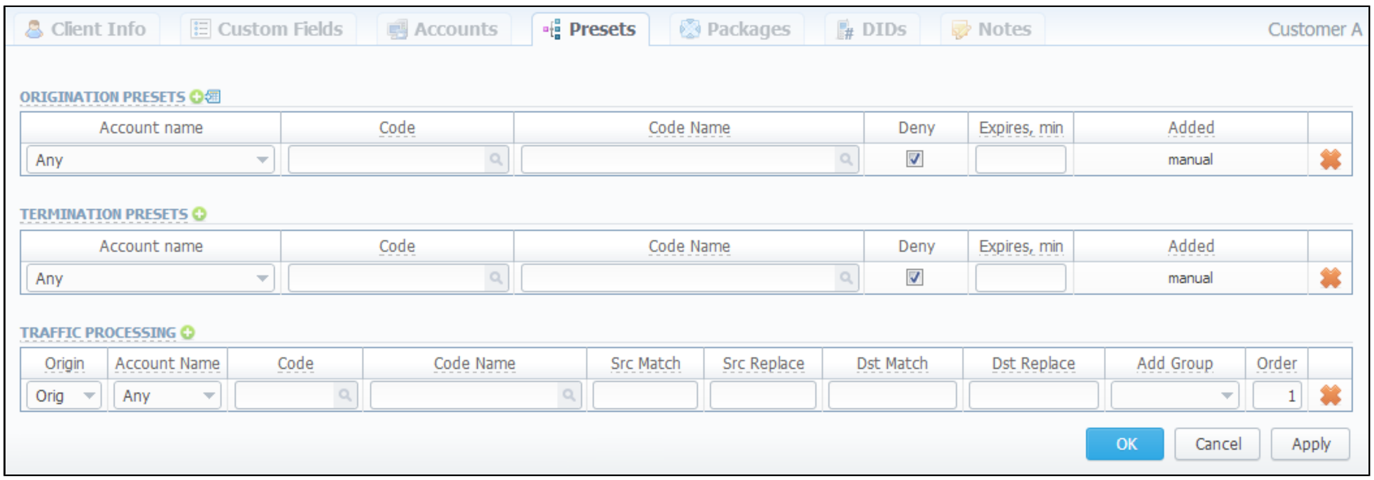
Presets Configuration

On this page

Client Presets Main Window

The main purpose of this section is to provide an ability to exclude (block) some routes from routing scheme and to provide number translation functions. To open it, press button. Configuration window will pop-up:

Screenshot: Client presets



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

Adding Routing Presets

To add a route press a respective button and enter all required information in next fields:

Field Name	Field Description
Account Name	Client's account, that should be used in current routing rule
Code	Specify a code of destination here (use * as wildcard)
Code Name	Or select a destination name in this field if applicable
Deny	Enable this to deny current route selection
Expires, min	Set a duration in minutes, for which the block should be active (leave blank to block forever)
Added	Shows, when and how the rule was originally added. *Manual* rules added using this section, *auto* rules added by Factors Watcher

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.

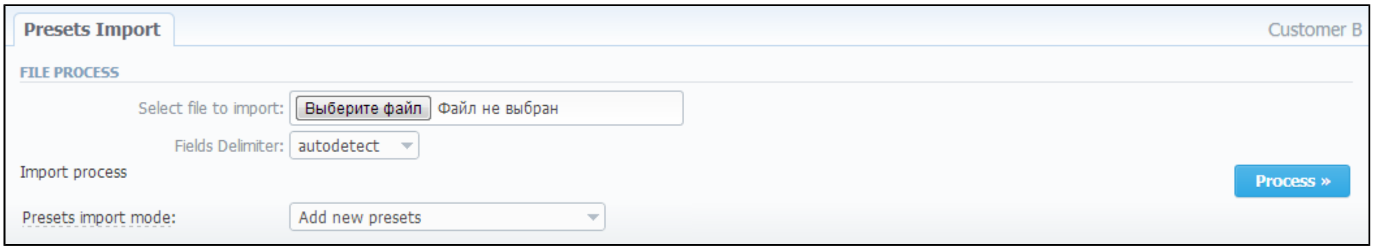
Whole mass import process can be logically divided in two steps.

Step 1. Selecting File and Specifying Additional Parameters

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

Uploaded *csv file should contain at list 2 rows.

Screenshot: Presets "Mass Import" feature main window



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

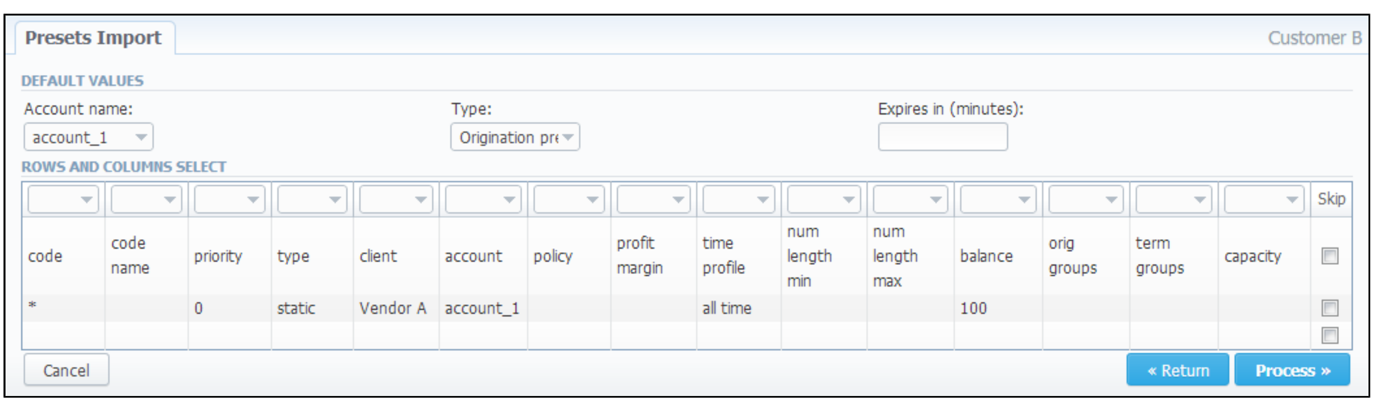
Field	Description	
Delimiter	Set delimiter for CSV file: comma, semicolon or tab	
Presets import mode	Select a type of import process	
	• ***Add new presets***	Add presets to already existing ones
	• ***Add new presets (purge all existing)***	Purge all existing presets and import new ones

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



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	
	• ***ORIG***	For calls originated from a client
	• ***TERM***	For calls terminated to a client
	• ***DR***	On Dynamic Routing, before sending calls to a terminator
Account Name	Select a respective account here	
Code	Specify a code of destination here (use * as wildcard)	
Code Name	Or select a destination name in this field if applicable	
Src Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will occur in 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.

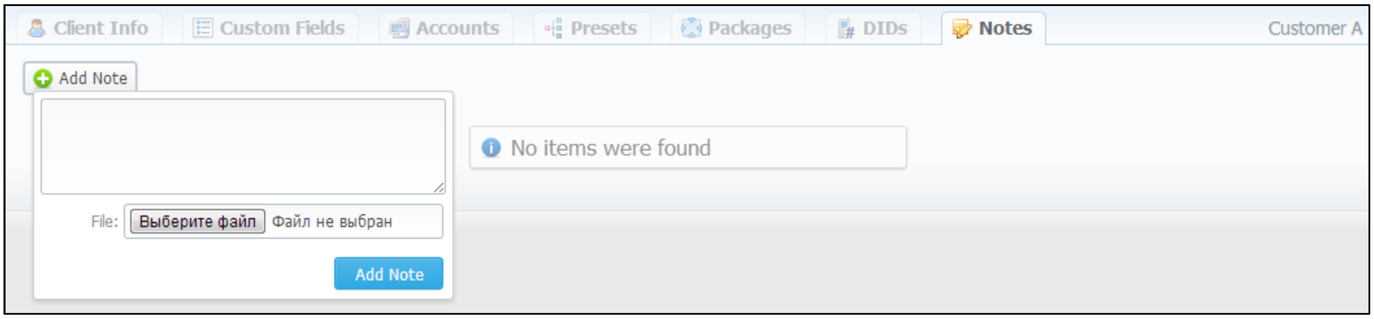
Tip: Please note that all routing related functions of this section are only available with ***Routing Module*** installed. Orig and Term number translations will work without ***Routing Module***.

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



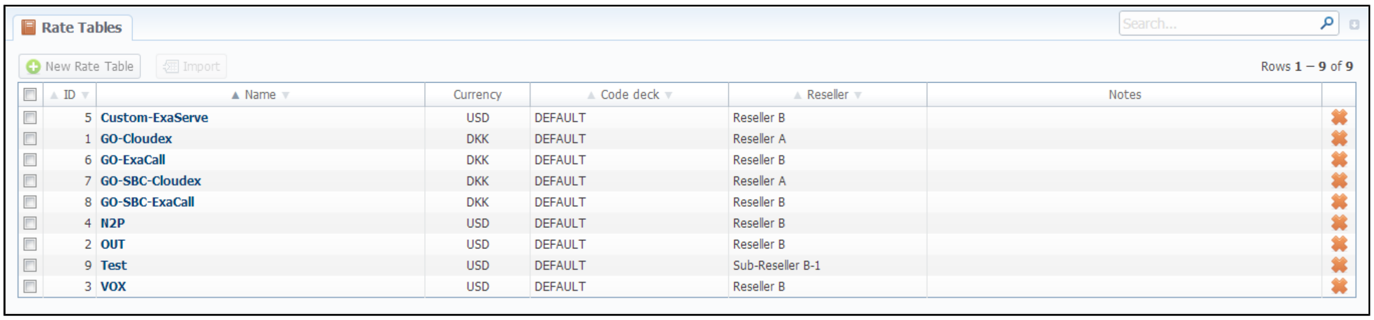
Rate Tables

On this page

Rate Tables Section Main Window

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

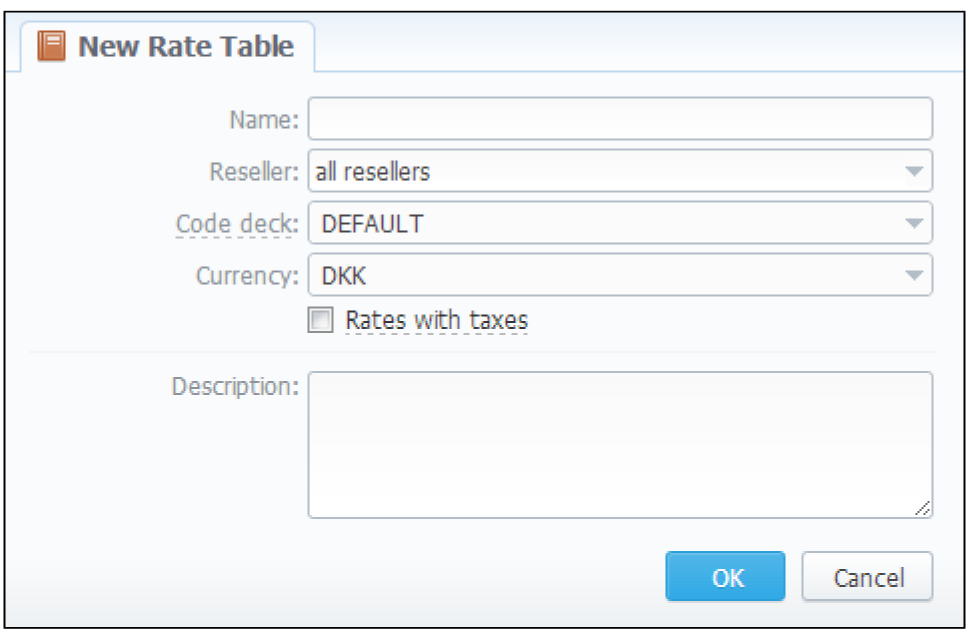
Screenshot: Rate Tables section main window



Adding New Rate Table

To add 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 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



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

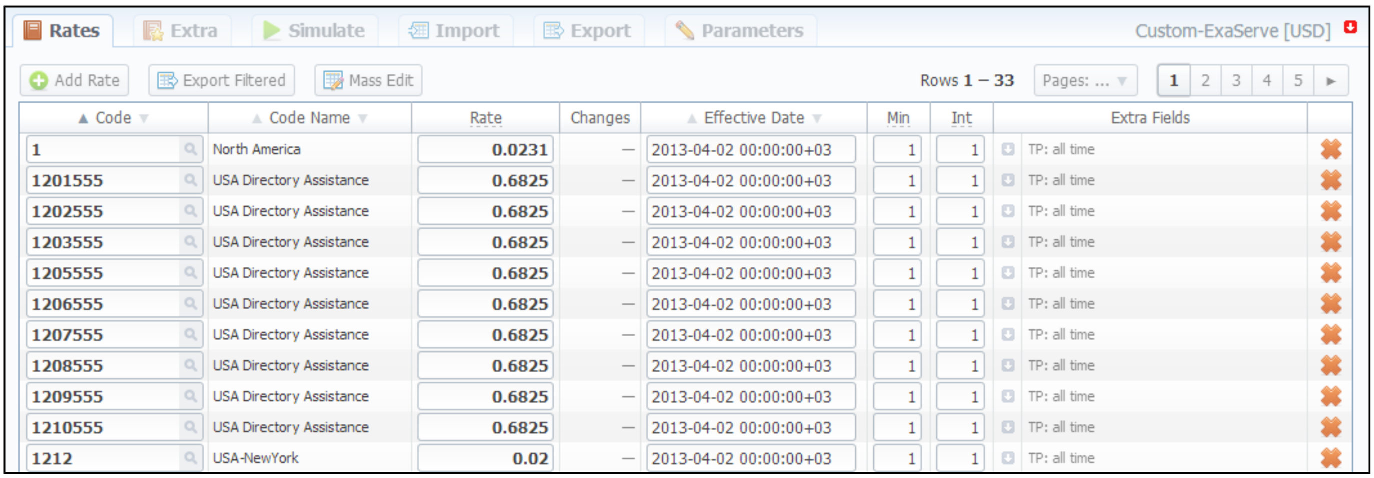
Rates Tab Description

On this page

Rates Section Tab

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

Screenshot: Adding new rates



Code	Code Name	Rate	Changes	Effective Date	Min	Int	Extra Fields
1	North America	0.0231	—	2013-04-02 00:00:00+03	1	1	TP: all time
1201555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1202555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1203555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1205555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1206555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1207555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1208555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1209555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1210555	USA Directory Assistance	0.6825	—	2013-04-02 00:00:00+03	1	1	TP: all time
1212	USA-NewYork	0.02	—	2013-04-02 00:00:00+03	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 tarificated. For example, if total call time was 20 seconds, and *Min Time* is 30, then client will pay for 30 seconds of call
Int	Tarification interval. This parameter is used, when *Min Time* time expires
Extra Fields	Additional parameters are stored under icon
	• ***Rate Group*** — Specify group for jurisdictional billing
	• ***End Date*** — After specified date the rate would not be used

	• ***Profile***	Which time profile will be used for current rate
	• ***Setup Fee***	Setup fee (charged when call duration is longer then 0 seconds)
	• ***Grace Time***	Time interval, below which calls are not tarificated (free time)
	• ***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. 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 seconds, then total call cost will be 0,8 currency units. If call duration was more than 30 seconds, then total call cost will be $0{,}3 + \frac{1}{60} \cdot quantity\ of\ call\ seconds$ 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 *grace time* value. Available options: preserve, set to
Min. Time	Change *minimal time* value. Available options: preserve, set to
Interval	Change *tarification interval* value. Available options: preserve, set to
Effective Date	Change *rate start date* value. Available options: preserve, set to
End Date	Change *rate end date* 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.

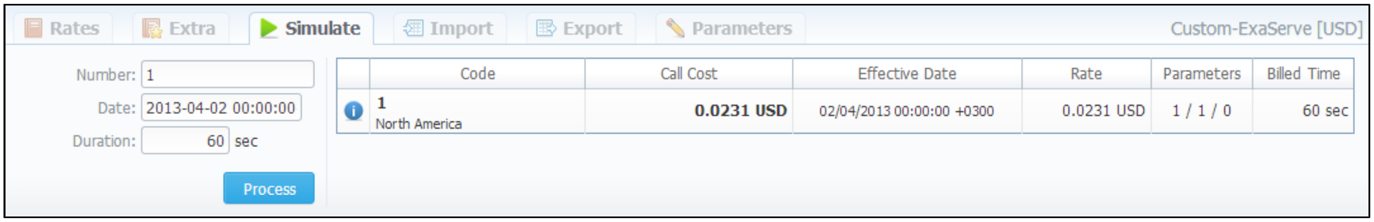
Extra Rates

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.

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



Description of analyze parameters is 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.

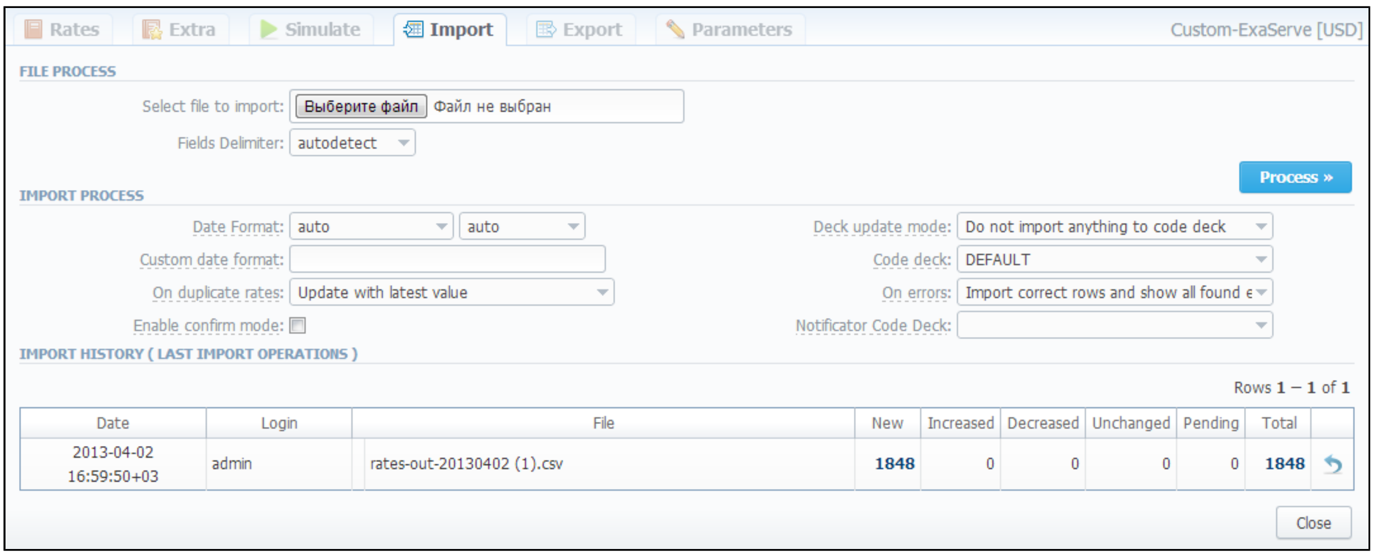
Import

On this page

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	
Date Format	Specify date format of imported file	
Custom date format	If defined, this format will be used for date parsing instead of *"Date Format"* 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

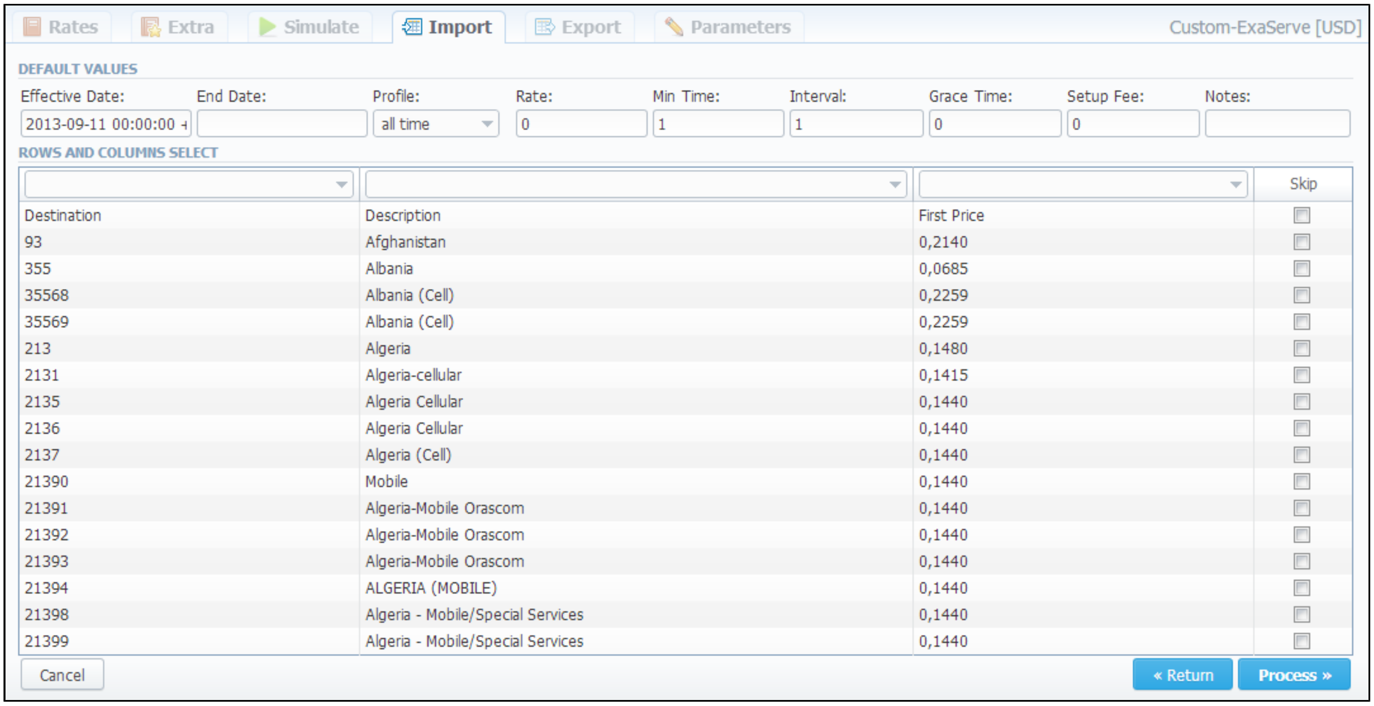
	• ***Skip duplicate rows***	If there are multiple duplicates, only first value will be stored
	• ***Alert me about duplicates***	If duplicate is found, VCS will alert you about their presence
"Enable confirm mode" Checkbox	Enables confirmation mode for imported rates. While in this mode, all rates that are imported into system, will have to additionally pass confirmation check by billing operator	
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 *code names* in addition to *codes*)	
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	

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: Rates importing process. Step 2

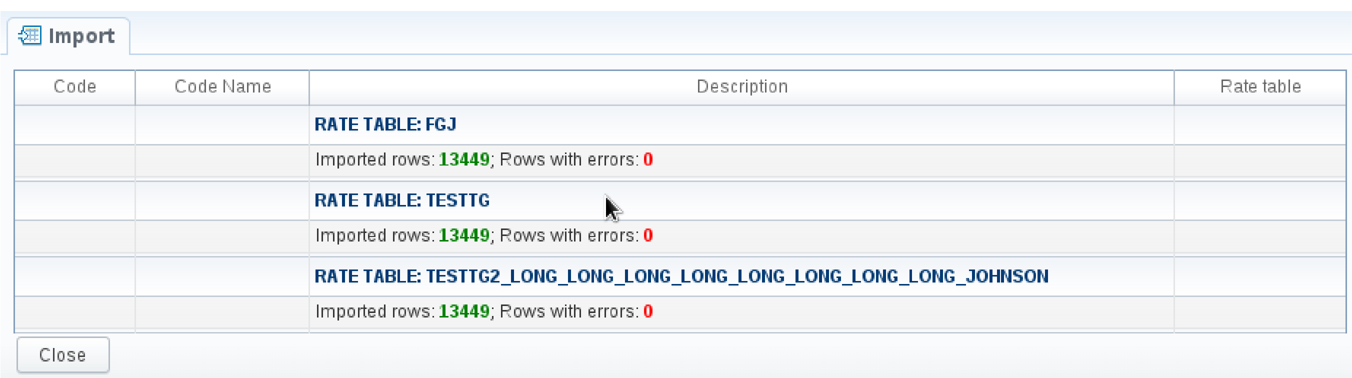


After you press *"Process>>"* for the last time, system will start importing process. When progress-bar reaches 100%, your import is done! Don't forget to confirm the rates, if you chose to import in *"confirm mode".*

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 usuall rates importing.

Screenshot: Mass rates importing.



Export

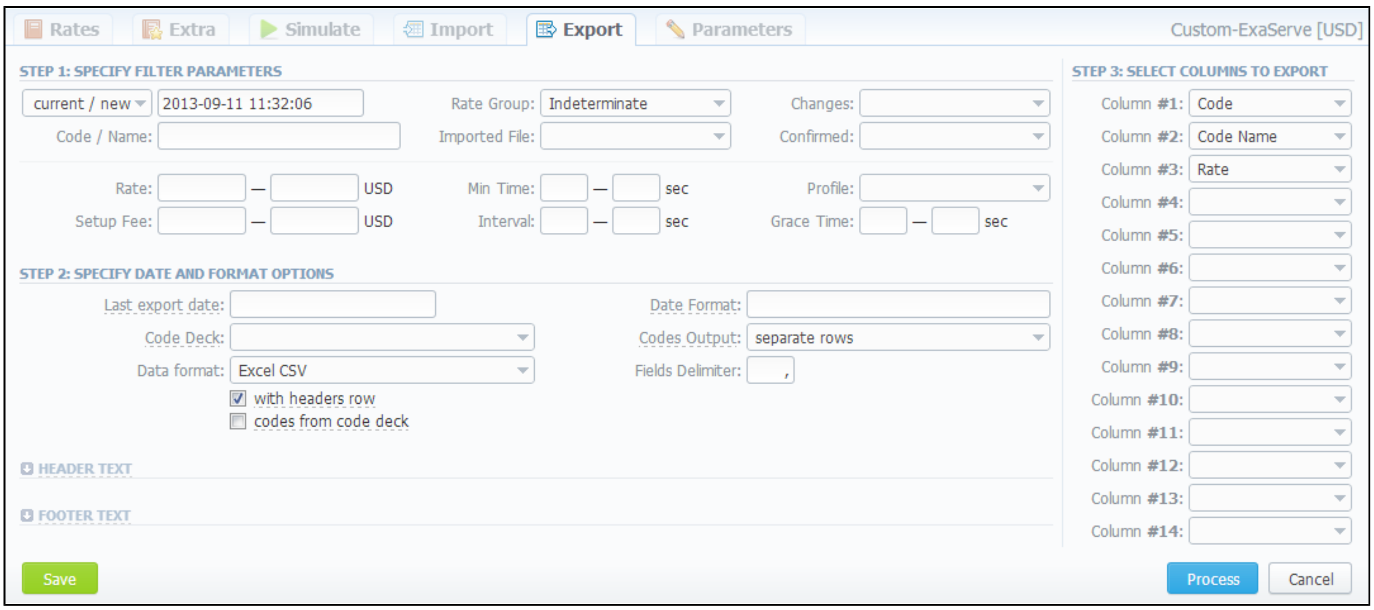
On this page

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



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 (*Decreased, Increased, Not changed, New*)
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 (*all time, business time, non-business time, weekends*)
Grace Time, sec	Specify gracr time interval

Step 2. Specifying Date And Format Options

Fill here next fields:

<table>
<tr><th>Field</th><th colspan="2">Description</th></tr>
<tr><td>Last export date</td><td colspan="2">Parameter that affects “Rate changes” field (depending on it exported rates will be marked as new, changed, deleted etc)</td></tr>
<tr><td>Date Format</td><td colspan="2">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</td></tr>
<tr><td>Code Deck</td><td colspan="2">Select a code deck here to rewrite code names in export file if needed</td></tr>
<tr><td rowspan="4">Codes Output</td><td colspan="2">Specify how codes should be displayed. There are few options</td></tr>
<tr><td>• Separate rows</td><td>Each code is placed into single row</td></tr>
<tr><td>• Delimited list</td><td>Codes are grouped by code name in a row, for example: 5510,5511,5512</td></tr>
<tr><td>• Ranges list</td><td>Codes are grouped by code name into ranges plus delimiter, for example: 5510-5512, 5515</td></tr>
<tr><td>Data Format</td><td colspan="2">Specify output file format, XLS or CSV</td></tr>
<tr><td>Fields Delimiter</td><td colspan="2">Set delimiter for fields if you've chosen CSV</td></tr>
<tr><td>"With headers row" Checkbox</td><td colspan="2">Include column names into the file</td></tr>
<tr><td>"Codes from code deck" Checkbox</td><td colspan="2">Allows to additionally filter the export, by selecting only codes which are present in specified Code Deck</td></tr>
<tr><td>Header text / Footer text</td><td colspan="2">Allows you to additionally put some text into exported file as header and footer respectively</td></tr>
</table>

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).

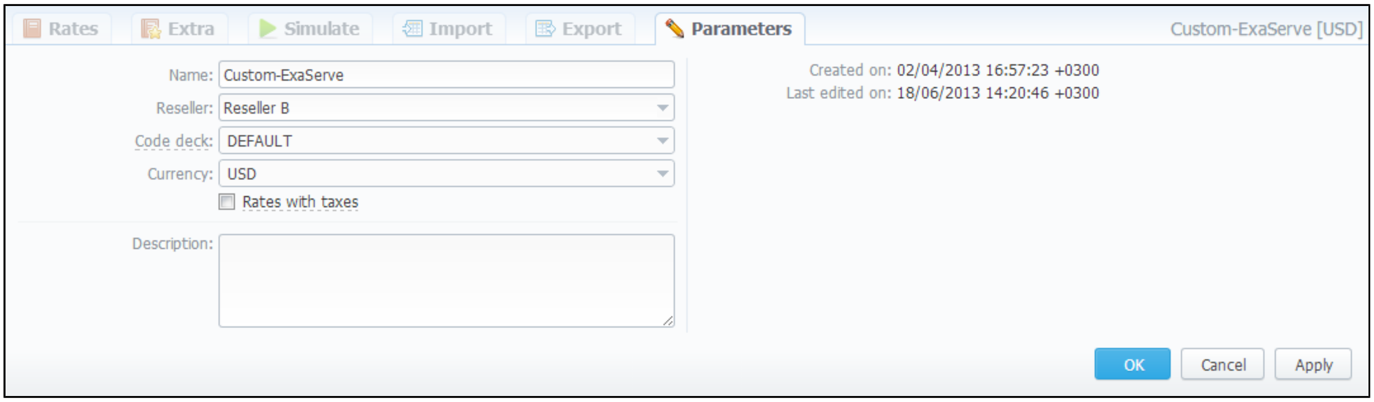
Press *“Process”* button and save exporting file when you finish setting the parameters.

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.

Parameters

This tab allows you to correct or change any settings that you entered when you created current Rate Table, such as it's *Name*, *Reseller*, *Currency* etc. (Screenshot):

Screenshot: Parameters section tab



Invoices

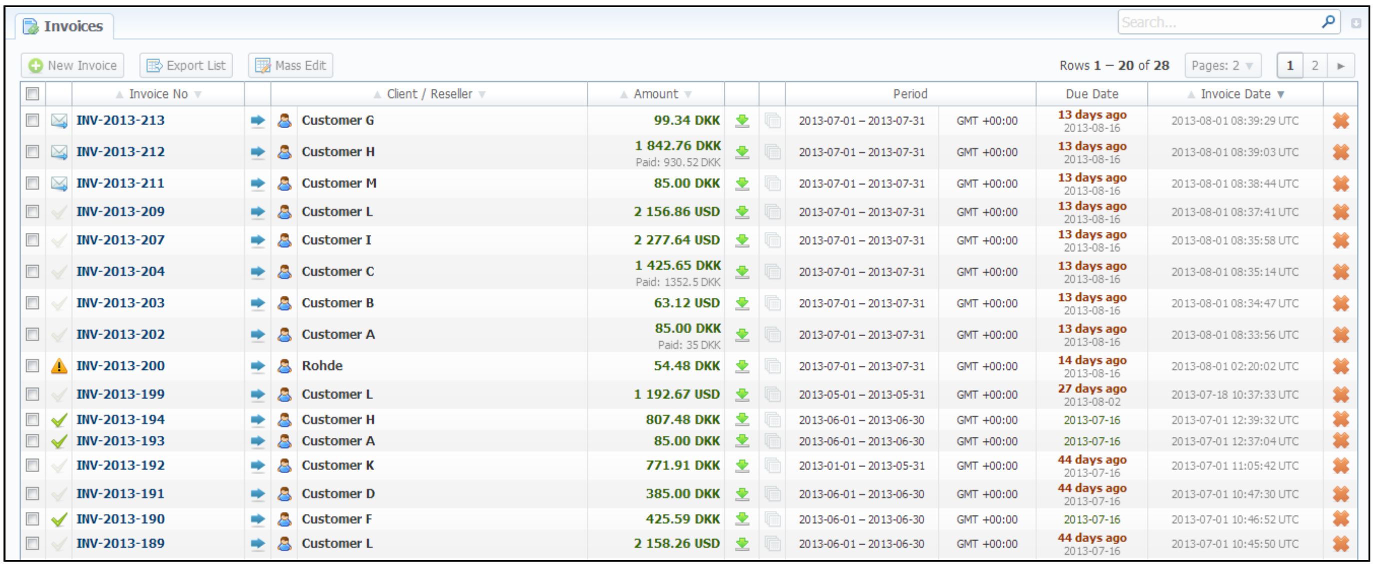
On this page

Invoices Section Main Window

Allows you to create and manage all outgoing and incoming invoices. By pressing  button you can download and view respective invoice file, and by pressing *"Export List"* you can download currently stored invoices list as CSV file.

Main window is presented as list:

Screenshot: Invoices section main window



It displays all created invoices. Description of list's columns is following:

Column Name	Description
Invoice No	Number of invoice
Client / Reseller	Name of client or reseller with corresponding icon
Amount	Total invoice sum
Period	Invoice period
Due Date	Shows due date for specific invoice
Invoice Date	Invoice creation date

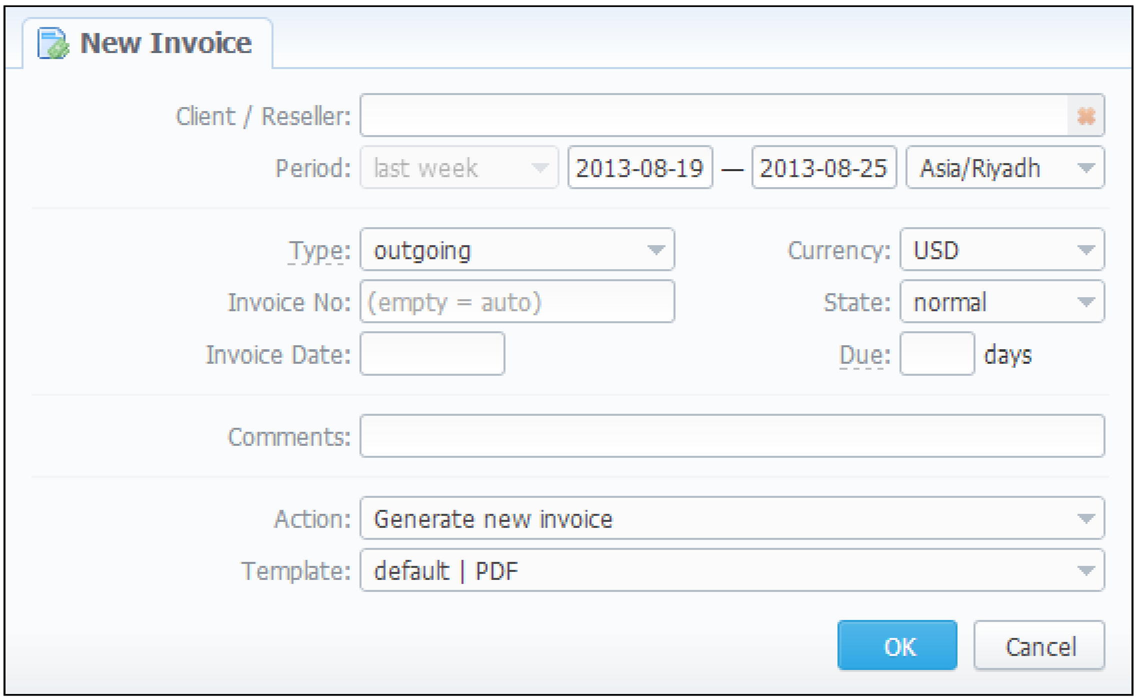
Icon	Description
	This icon tells you that respective invoice was paid in full. If the invoice is not fully paid, this icon will be grey
	This icon defines *to verify state* and tells you that this invoice is awaiting to be checked before it will be sent to client

	This icon defines *to send state,* and this means that invoice is in sending queue
	Outgoing invoice
	Incoming invoice
	By pressing this icon you can download and view respective invoice file
	By pressing this icon you can delete respective invoice

Creating New Invoice

Invoices are created through *"New Invoice"* button. When you press it, a pop-up window will show up:

Screenshot: Create Invoice window



Here you can select a client or reseller, invoice currency, invoice number (leave this field empty for automatic number generation) and select the state of this newly created invoice (*to send*, *to verify* or *normal*). In *"Invoice Date / Due (days)"* field you can specify the actual invoicing date and payment due in days. Also you can *"Generate new invoice"* or *"Attach existing invoice"*.

When *"Attaching existing invoice"* you can only additionally specify the invoice destination (incoming or outgoing), specify the sum of the invoice and attach the invoice file. This feature is mainly used when your invoice was generated by some other third-party software.

When *"Generate new invoice"* is selected, you possess the following invoicing instruments:

- **Period** - specify the period of statistics that will be included into invoice;
- **Output in** – specify the resulting file format, PDF or XLS;
- **By template** – select a template that should be used to create current invoice. These templates define your invoice contents and look and are created and managed in *Configuration – Invoices Templates* section.

Tip: All automatically created invoices will be in *check* state. To send the invoice to client you will need to change its state to *send* state manually!

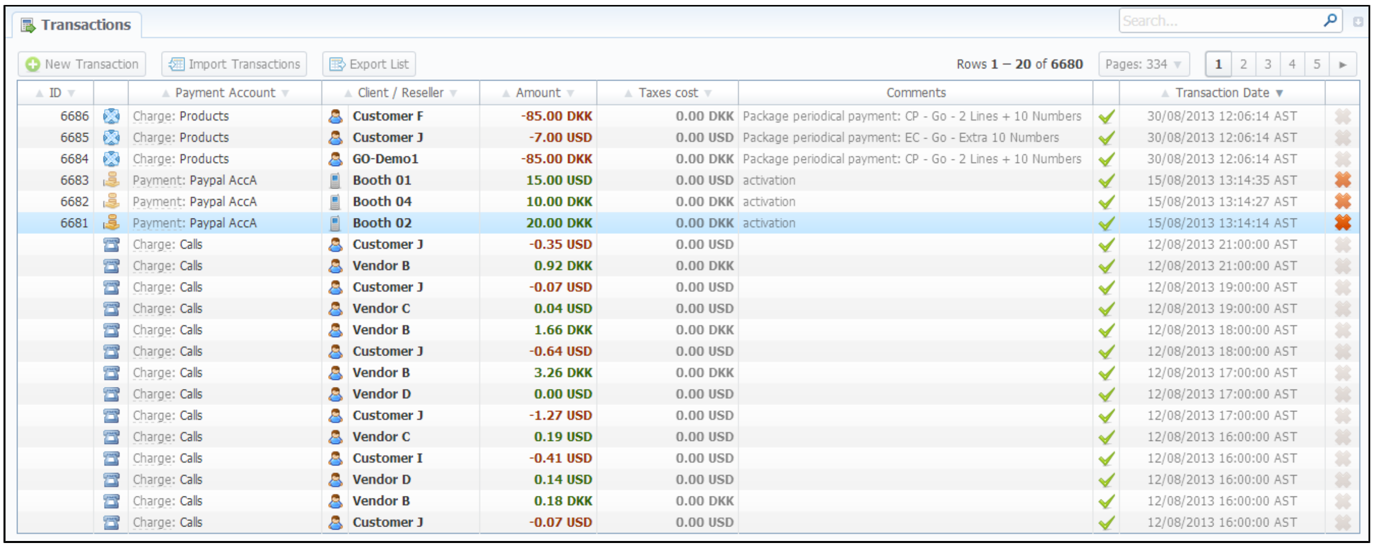
Transactions

On this page

Transactions Section Main Window

This section allows you to perform financial operations with client's / reseller's balances and also track 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:

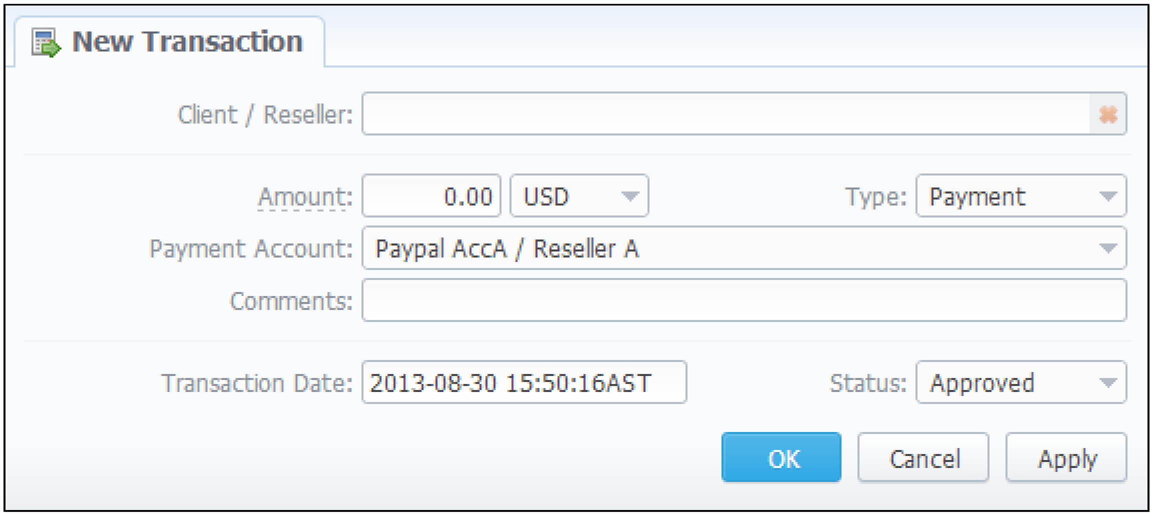
Column Name	Description
ID	A payment thorough ID number
Payment Account	Displays respective payment account, related to a performed payment
Client / Reseller	Displays the name of client or reseller that was engaged in payment operation
Amount	The respective payment operation sum
Taxes Cost	The respective 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 press *“New Transaction”* button. In new window specify such parameters as: transaction date, select a client or reseller, payment account, amount, etc. and press *“OK”* button (Screenshot).

Screenshot: New transaction window



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.

"Import Transactions" and "Export List" Buttons

If you press *“Import Transactions”* button, you will be able to perform import of payments. Simply click this button and follow on-screen instructions. There are only 4 important fields that your file should include, being: customer name, payment sum, payment date and payment description.

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

You can edit payment properties by pressing respective transaction icon.

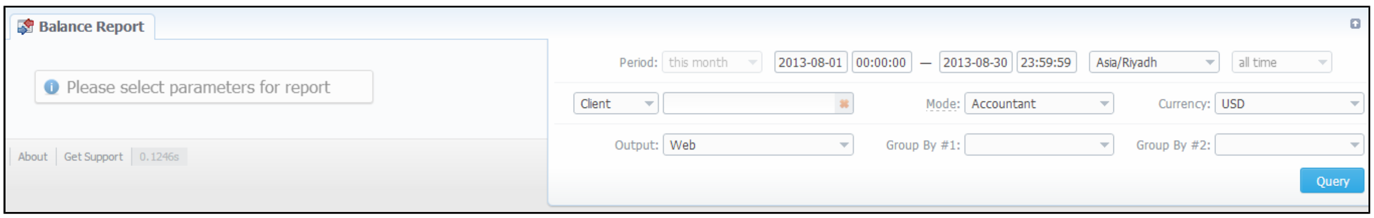
Balance Report

On this page

Balance Report Section Main Window

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:

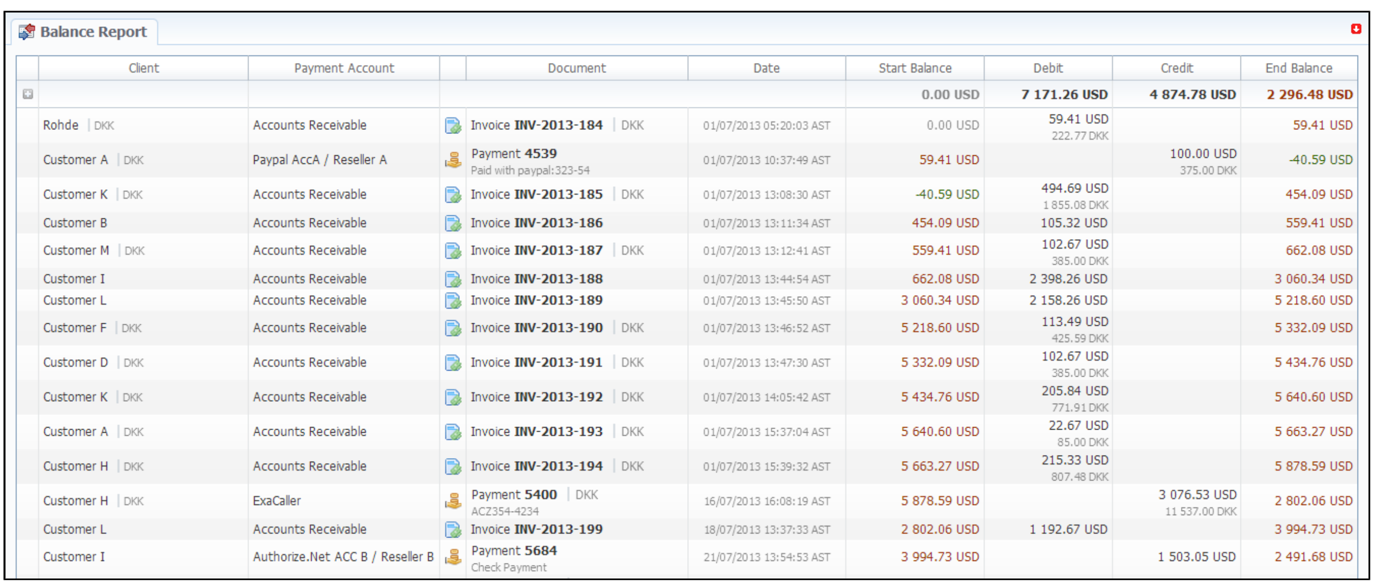
Screenshot: Balance Report section main window



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 rec eived 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



Balance 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.

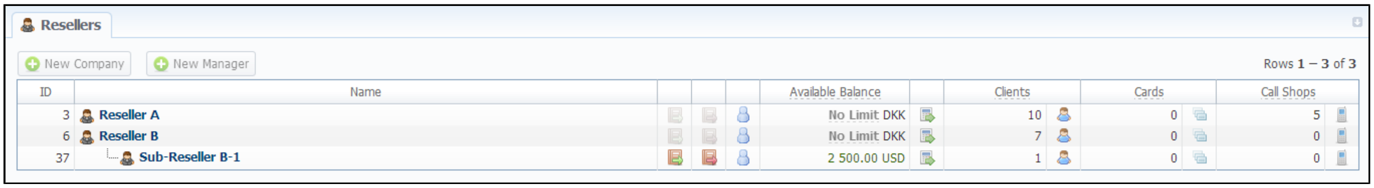
Resellers

On this page

Resellers Section Main Window

This section allows you to specify the information about your company and make use of *Reseller and Agent features*. Main window of this section is presented on screenshot:

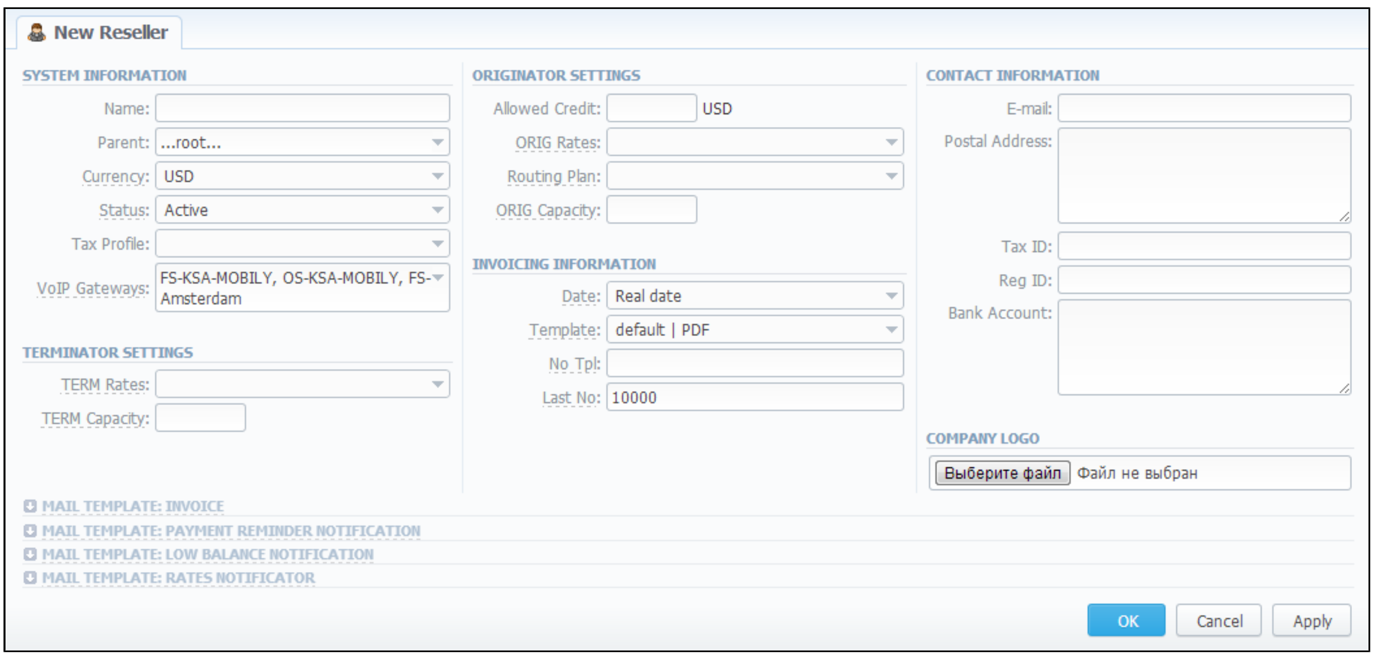
Screenshot: Resellers section main window



Adding New Company

To add a company, press *"New Company"* button, and a window with Reseller's properties will open (Screenshot down below).

Screenshot: Adding new reseller



Section	Fields Description
System Information	General information about client

	• ***Name***	A resellers's name
	• ***Parent***	Select a parent for this reseller
	• ***Currency***	Preferred currency for rates and invoices
	• ***Status***	Current reseller status
	• ***Tax Profile***	Select a tax profile, that will be used for this reseller
	• ***VoIP Gateways***	Select respective gateways that are allowed to this reseller
Originator Settings	Current reseller's billing settings are specified here	
	• ***Allowed Credit***	Enter a credit value for your reseller here
	• ***ORIG Rates***	Rates for incoming calls from customers under current reseller (by which you sell route to the reseller). Requires resellers billing mode enable
	• ***Routing Plan***	Default routing plan for customers of this reseller, if no other specified in client profile
	• ORIG Capacity	Origination capacity from this reseller summed for all clients that belong to him. Leave this field empty for unlimited capacity
Terminator Settings	Current reseller's billing settings are specified here	
	• ***TERM Rates***	Rates for outgoing calls to providers under this reseller (by which you buy from the reseller). Requires resellers billing mode enable
	• ***TERM Capacity***	Termination capacity to this reseller summed for all clients that belong to him. Leave this field empty for unlimited capacity
Invoicing Information	Current reseller's invoicing settings are specified here	
	• ***Date***	Allows you to select how system sets invoicing date: • ***Real date*** – sets invoicing date to actual invoicing date • ***Last day*** – sets invoicing date to date of last day of invoicing period
	• ***Template***	Select default template to be used with this reseller's clients
	• ***No Tpl***	Allows to define default format of invoice's name
	• ***Last No***	Define last used invoice number here

Contact Information	Some additional information about reseller can be entered here	
	• ***E-mail***	Company's e-mail
	• ***Postal Address***	Company's postal address
	• ***Tax ID***	An ID of tax paying entity
	• ***Reg ID***	Company's registration ID
	• ***Bank Account***	Company's bank account info
Company Logo	Here you can add the file with company's logo	

If you specify rate tables in Termination / Origination Settings the Reseller Billing Mode will be enabled automatically. It means that during quering Summary or CDRs Report the statistics' rates will be dispayed considering to specified rate tables.

Reseller Removal

To delete a Reseller from the system change the status from Active to Deleted in Reseller's Properties window. But pay attention that in fact a reseller 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. (Screenshot below)

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

To configure any of these templates, click on its name. As an example here presented templates configuration syntax concerning Resellers data, which is the following:

Templates Configuration Syntax	Description
${['company_name']}	The name of reseller or company
${['company_email']}	The e-mail of reseller or company
${['company_payinfo']}	Reseller or company bank details
${['company_address']}	Post address of reseller or company

${['c_dt']}	Invoice date
${['period_start']}	Invoice period start
${['period_finish']}	Invoice period end
${['c_company']}	Invoiced company name
${['c_address']}	Invoiced company address
${['c_email_billing']}	Invoiced company e-mail
${['total']}	Invoice total sum
${['no']}	Invoice number

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
- Payment Gateways

Calling Cards

On this page

Calling Cards Section Main Window

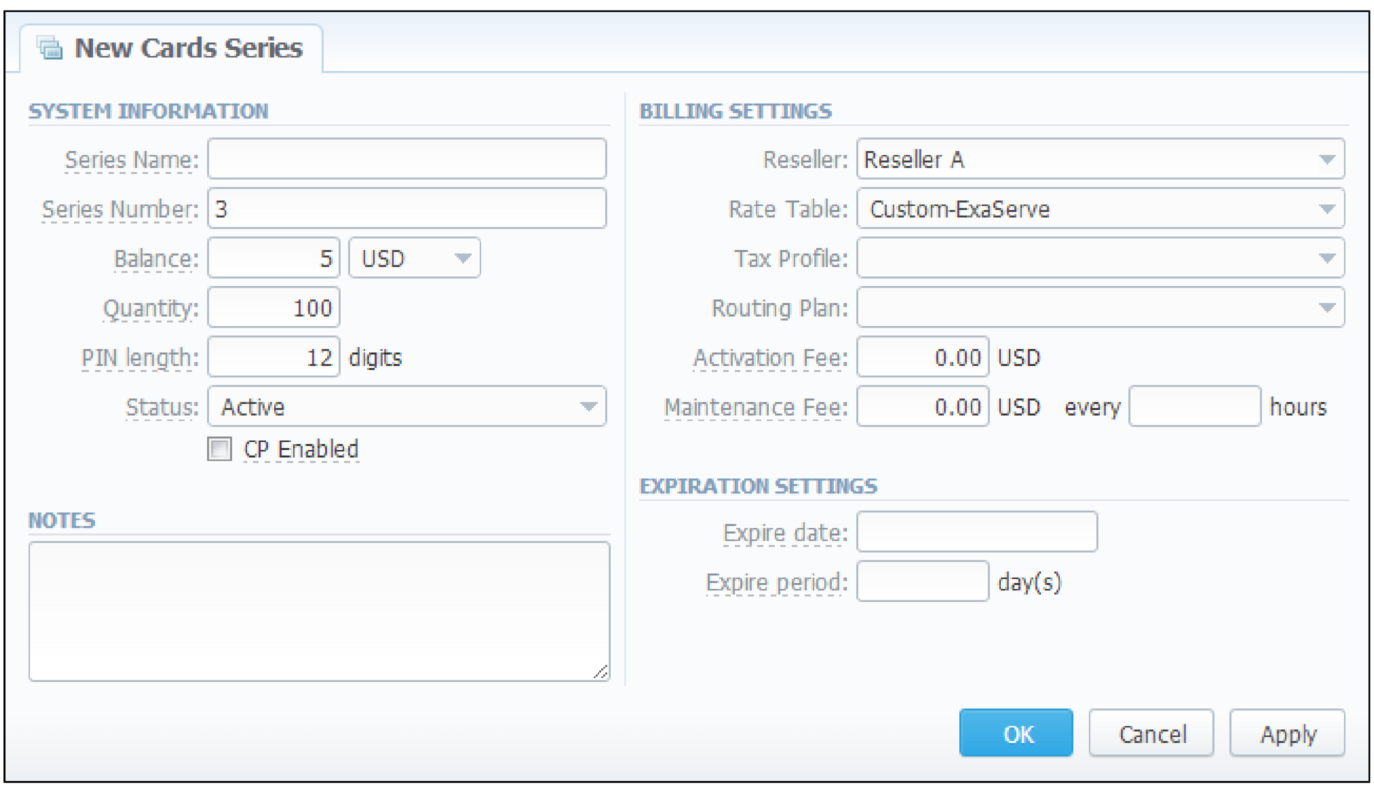
This section represents built-in calling card generator that allows you to generate card series for prepaid customers. Each generated card is considered a billing client, so customer can perform calls, login to his control panel to browse statistics and other relevant information. Main window of this section looks like on screenshot:

Screenshot: Calling Cards section main window

Creating Card Series

To create card series, press *«New Cards Series»* button. A new window will pop-up:

Screenshot: Generate card series window



Enter all required info in fields below:

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
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
Reseller	Defines what reseller owns current calling card series
Rate Table	What rate table should be used with calling cards within current series
Routing Plan	Select a routing plan for current card series
Activation Fee	Enter activation fee in this field
Maintenance Fee	When specified number of days pass, starting from activation date, current calling card series will be expired
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:

- **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).

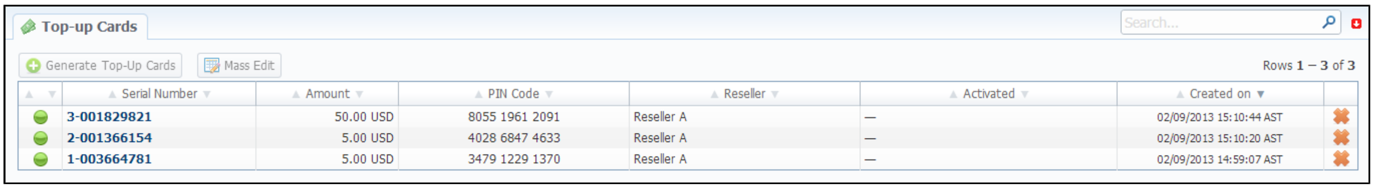
Top-up Cards

On this page

Top-up Cards Section Main Window

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:

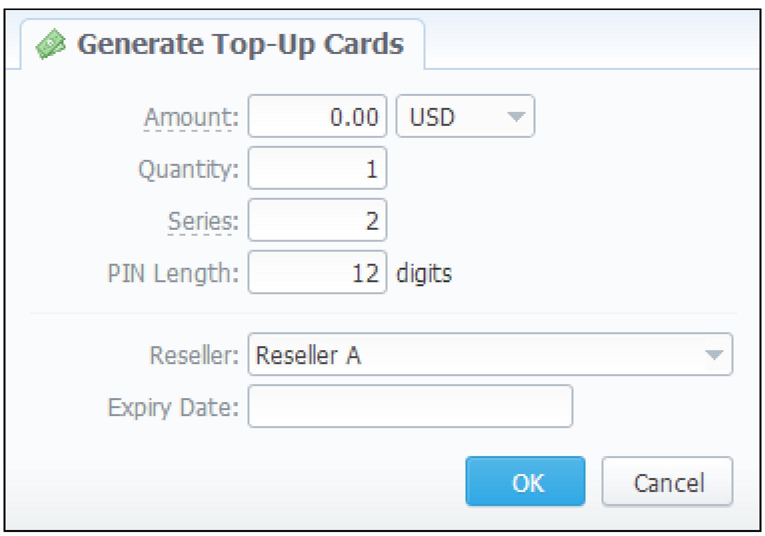
Screenshot: Top-Up Cards section main window



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



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).

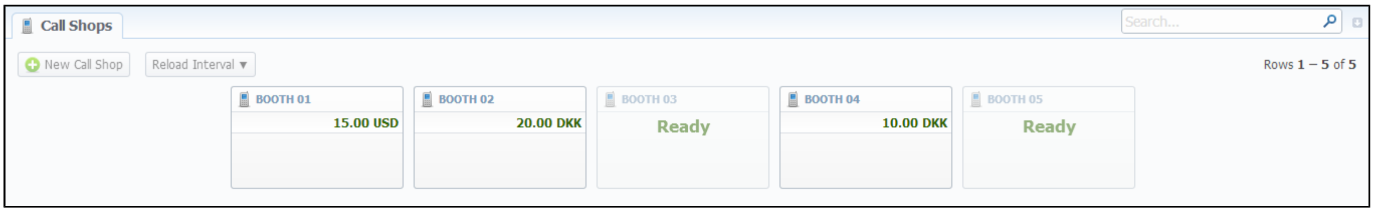
Call Shops

On this page

Call Shops Section Main Window

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:

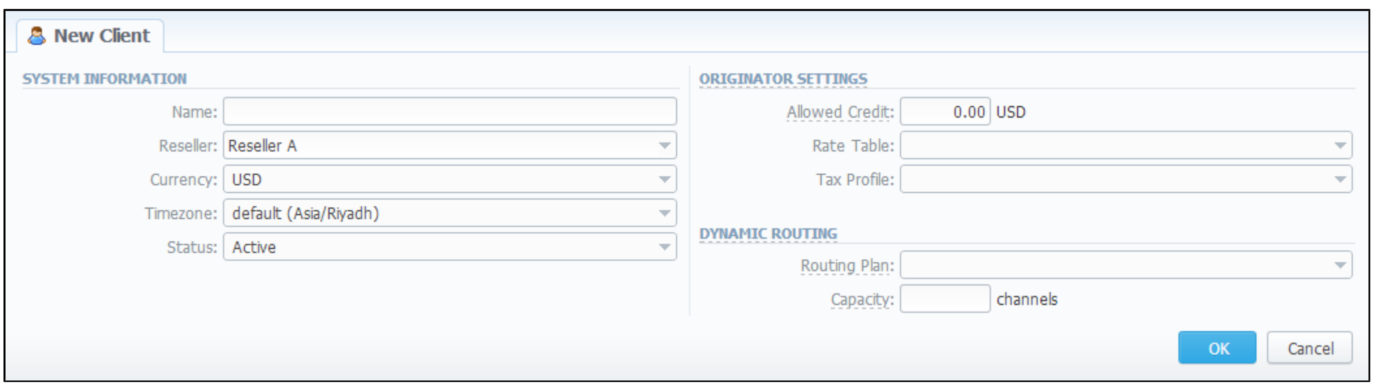
Screenshot: Call Shops section main window



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



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.

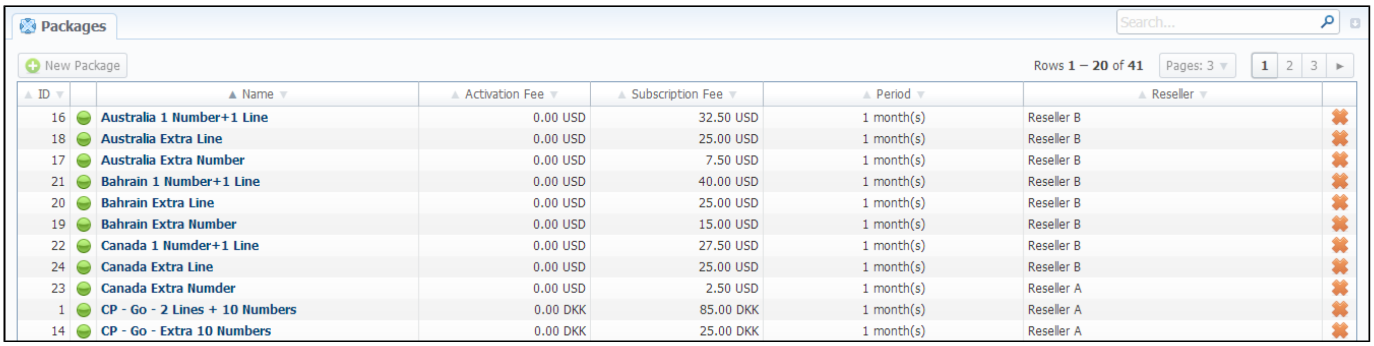
Packages

On this page

Packages Section Main Window

The *Packages* section is there to help you add and manage any one-time or periodic additional 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 below):

Screenshot: Packages section main window

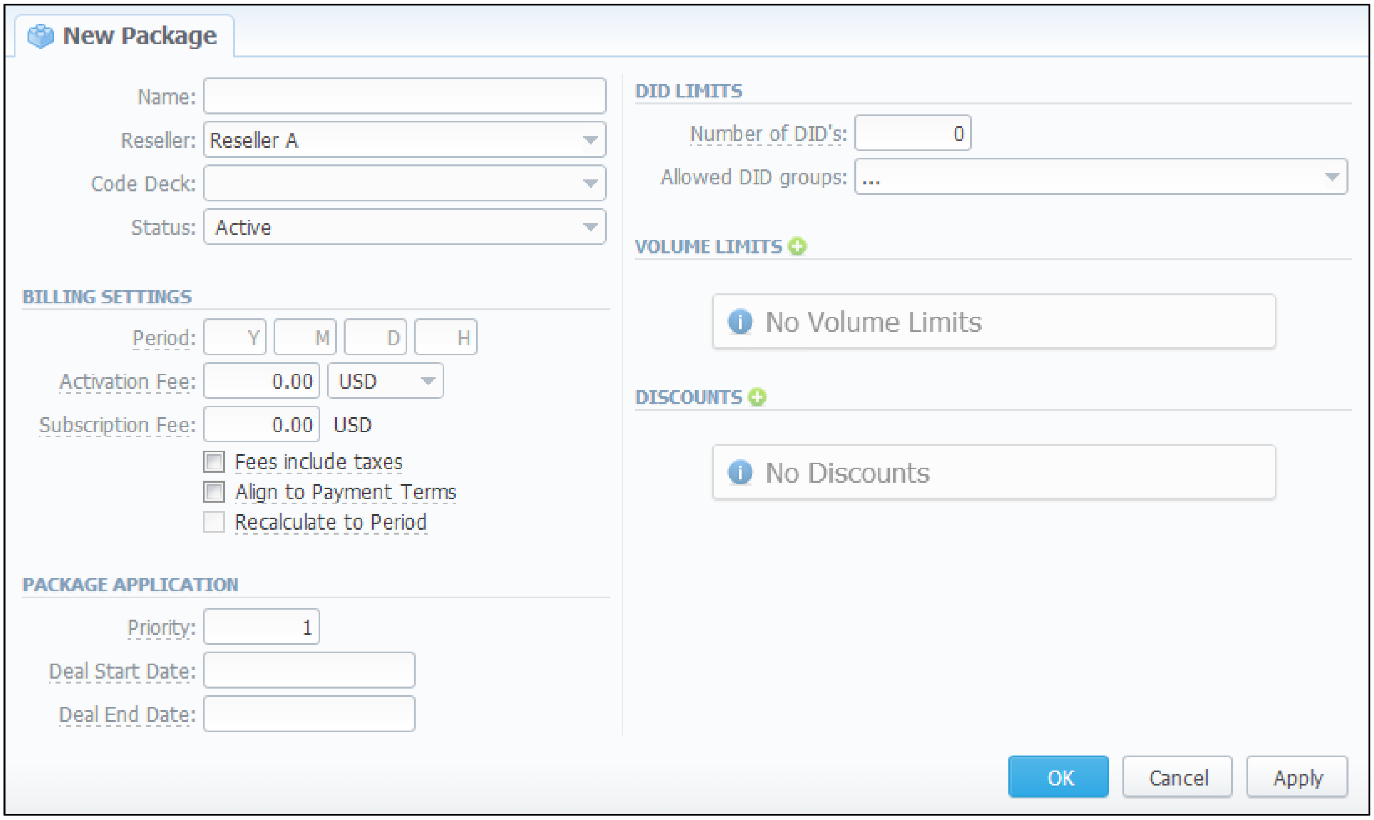


ID		Name	Activation Fee	Subscription Fee	Period	Reseller	
16		Australia 1 Number+1 Line	0.00 USD	32.50 USD	1 month(s)	Reseller B	
18		Australia Extra Line	0.00 USD	25.00 USD	1 month(s)	Reseller B	
17		Australia Extra Number	0.00 USD	7.50 USD	1 month(s)	Reseller B	
21		Bahrain 1 Number+1 Line	0.00 USD	40.00 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	
22		Canada 1 Numder+1 Line	0.00 USD	27.50 USD	1 month(s)	Reseller B	
24		Canada Extra Line	0.00 USD	25.00 USD	1 month(s)	Reseller B	
23		Canada Extra Numder	0.00 USD	2.50 USD	1 month(s)	Reseller A	
1		CP - Go - 2 Lines + 10 Numbers	0.00 DKK	85.00 DKK	1 month(s)	Reseller A	
14		CP - Go - Extra 10 Numbers	0.00 DKK	25.00 DKK	1 month(s)	Reseller A	

Adding New Package

You can add new package by pressing *«New Package»* button. New window that opens contains the following information (Screenshot below):

Screenshot: Package properties



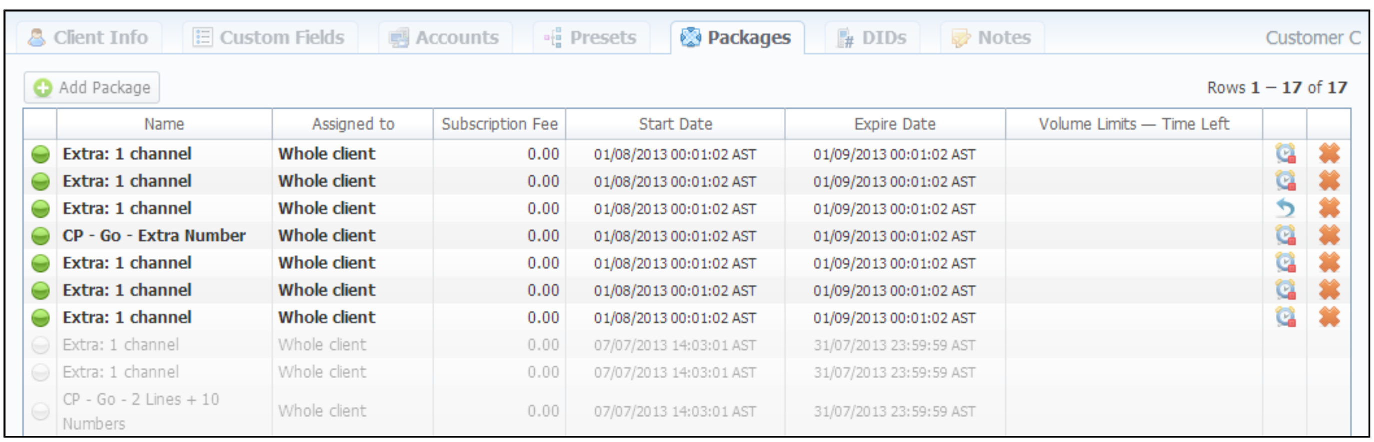
Field Name	Description
Name	Name of your package
Reseller	Specify an owner for this package
Code Deck	Specify Code Deck if you plan to create *limits* by using Code Names
Status	Current status of package (*Active, Disabled, Archive*)
Period	Specify a period for current package if it's renewable
Activation Fee	A fee that will be charged upon package activation
Subscription Fee	A fee that will be charged upon package renewal
"Fees include taxes" Checkbox	If enabled, taxes are included into package prices, if disabled – taxes will be calculated with respective Tax Profile of customer
"Align to Payment Terms" Checkbox	Allows system to align period of package to customer's payment Terms, evening Package billing with actual invoicing for voice traffic
"Recalculate to Period" Checkbox	Allows subscription cost recalculation for remaining days in Payment Terms period, if Package was activated somewhere in the middle of mentioned period
Priority	If there are multiple packages that satisfy a call, then a package with highest priority will be used
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
	• ***Number of DID's*** How many DID's can be assigned at the same time

	• ***Allowed 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	
	• ***Code***	Specify a code
	• ***Code Name***	Specify a code name from selected Code Deck
	• ***Limit (min)***	Enter amount of free minutes that will be used in current promotion for specified code or code name
Discounts	A promotional discount on package *"Subscription Fee"*, applied after given number of package reactivations	
	• ***Activation Count***	Specify which activation will trigger the discount
	• ***Discount***	How much would be taken off of package *"Subscription Fee"*. Note, the value is in currency points, not in percents

Packages Tab

Packages management subsection tab allows you to assign any of your packages to respective client. To access these settings, go to *Management – Clients* and press button. In new window (Screenshot below), you can see the following:

Screenshot: Packages management



Column	Description
Name	Name of assigned package
Assigned to	Shows for whom package is assigned
Subscription Fee	The package price
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)
Volume Limits –Time Left	Shows, if respective package has some volume limits and time left

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 *Packages Manager* starts
	Click this icon to delete the package

"Add Package" Button

Press *"Add Package"* button and in the pop-up window select a package from list and assign it by pressing *«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.

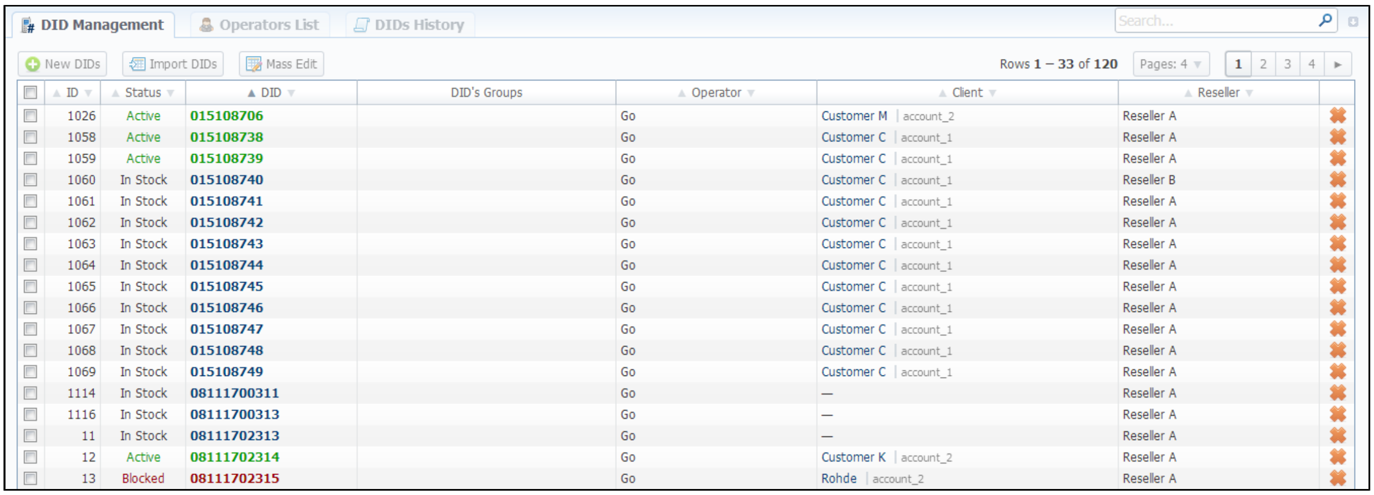
DID Management

On this page

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



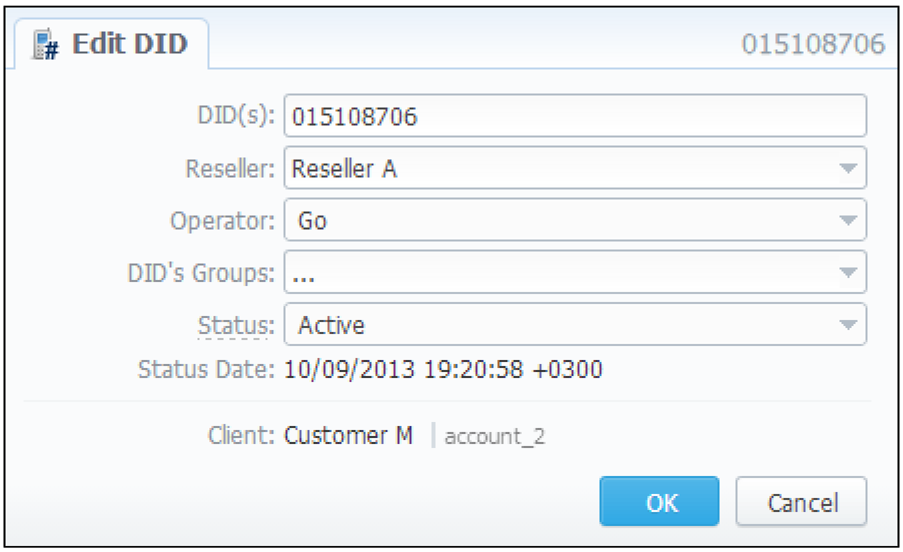
<table>
<tr><th>Column</th><th colspan="2">Description</th></tr>
<tr><td>ID</td><td colspan="2">ID of current DID number</td></tr>
<tr><td rowspan="7">Status</td><td colspan="2">Status of current DID number</td></tr>
<tr><td>• Active</td><td>Is in use by a customer</td></tr>
<tr><td>• In Stock</td><td>DID is available for usage</td></tr>
<tr><td>• Blocked</td><td>Temporarily blocked</td></tr>
<tr><td>• Reserved</td><td>Not used DID, but not available for purchase yet</td></tr>
<tr><td>• Hold</td><td>Is on hold after usage, should become "In Stock" soon</td></tr>
<tr><td>• Archived</td><td>Not used and not available anymore</td></tr>
<tr><td>DID</td><td colspan="2">Current DID number</td></tr>
</table>

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

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.

Payment Gateways

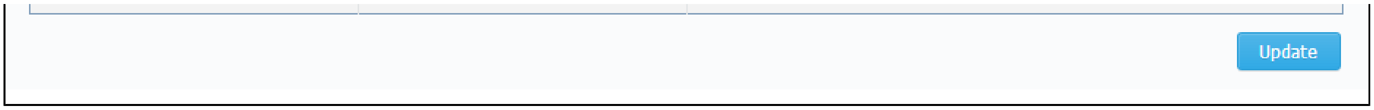
On this page

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 and Ukash* (Screenshot).

Screenshot: Payment Gateways section main window


PAYPAL
ORDER POSITION: 0
E-mail: paypal@exa.com.sa
You PayPal e-mail, payment recipient.
Gateway Currency: U.S. Dollar (USD)
Currency which will be used by user to perform a payment.
System Currency: USD
This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).
Amount Limits: 50, 100, 200, 500, 1000
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: Paypal AccA / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
AUTHORIZE.NET
ORDER POSITION: 0
Login: admin
Add your API login ID
Transaction Key: ••••••••
Add your API transaction key
Amount Limits:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
MONEYBOOKERS
ORDER POSITION: 0
E-mail:
Your Moneybookers e-mail, payment recipient
Secret word:
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: DKK
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:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
TOP-UP CARDS
ORDER POSITION: 0
Payment Account: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
UKASH
ORDER POSITION: 0
Security Request Token:
20-Character alphanumeric unique Request-Token provided by Ukash. The token is used to validate the merchant account.
Security Response Token:
20-Character alphanumeric unique Response-Token provided by Ukash. The token is used to validate the merchant account.
Brand Id:
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: DKK
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:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.



Configuring Payment Gateways

To configure 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 *Gateway Currency*
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

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.

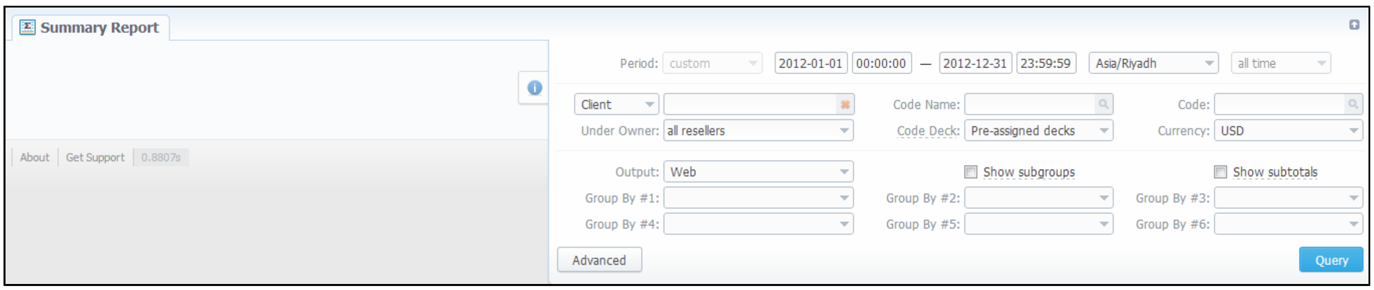
Summary Report

On this page

Summary Report Section Main Window

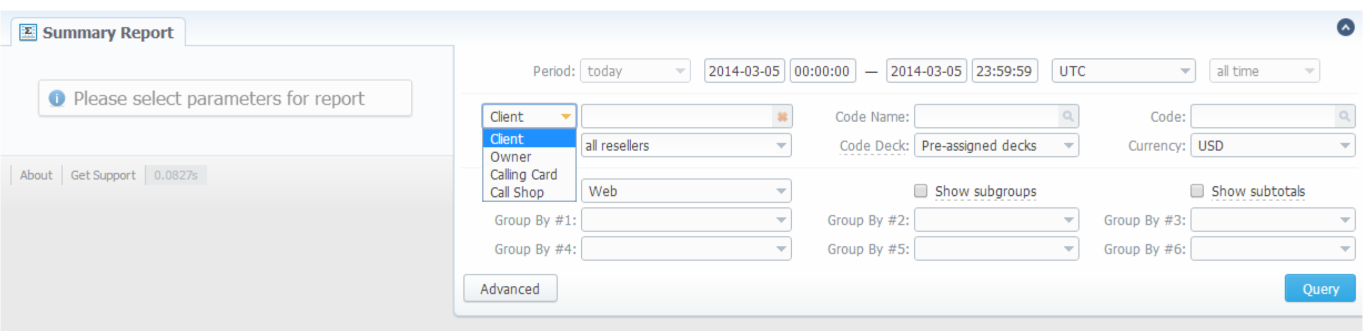
This section allows you to form summary reports of statistics. Main window of this section is displayed as a search form (Screenshot below):

Screenshot: Summary Report search form



Summary report can be queued for 4 billing units: *Client, Owner, Calling Cards* and *Call Shops*.

Screenshot: All types of client in Summary Report.

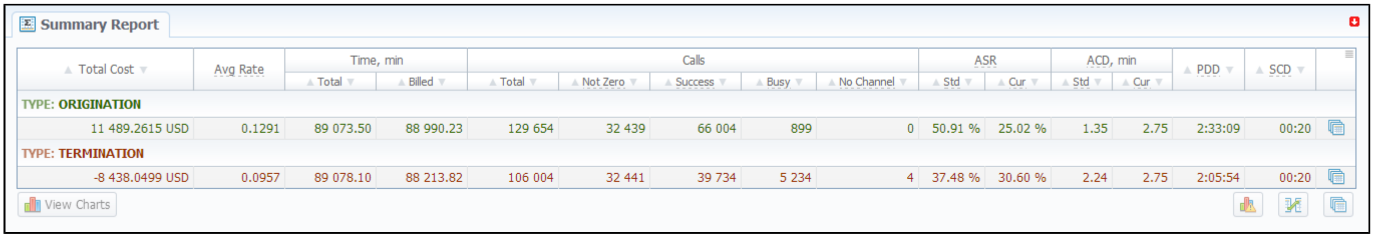


If report is queued for Reseller (Owner) so the Reseller Billing Mode should be configured. To configure it just insert rate tables in Reseller's Setting Panel.

Creating New Report

To create a report, specify a period, select a client (or a calling card) and any/all of his accounts, phone prefix and its group, call route, currency, VoIP-host and press *"Query"* button. Report can be formed either as HTML-document, XLS or CSV file. After selecting all needed parameters you will get a report like on screenshot below:

Screenshot: Summary Report window



Summary Report

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														
11 489.2615 USD	0.1291	89 073.50	88 990.23	129 654	32 439	66 004	899	0	50.91 %	25.02 %	1.35	2.75	2:33:09	00:20
TYPE: TERMINATION														
-8 438.0499 USD	0.0957	89 078.10	88 213.82	106 004	32 441	39 734	5 234	4	37.48 %	30.60 %	2.24	2.75	2:05:54	00:20

View Charts

Report data columns are following:

Column	Description	
Total Cost	Total call cost	
Avg Rate	Average Rate per minute, calculates as total cost / total 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
	• ***Busy***	"Busy" calls quantity
	• ***No Channel***	No circuit / channel available
ASR	average successful rate (successful calls percent)	
	• ***Std***	Number of calls with "success" status divided by total number of calls minus all calls with "no channel available" status
	• ***Cur***	Number of calls with duration > 0 divided by total number of calls
ACD, min	average call duration	
	• ***Std***	Sum of all calls durations divided by number of calls with "success" status
	• ***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.

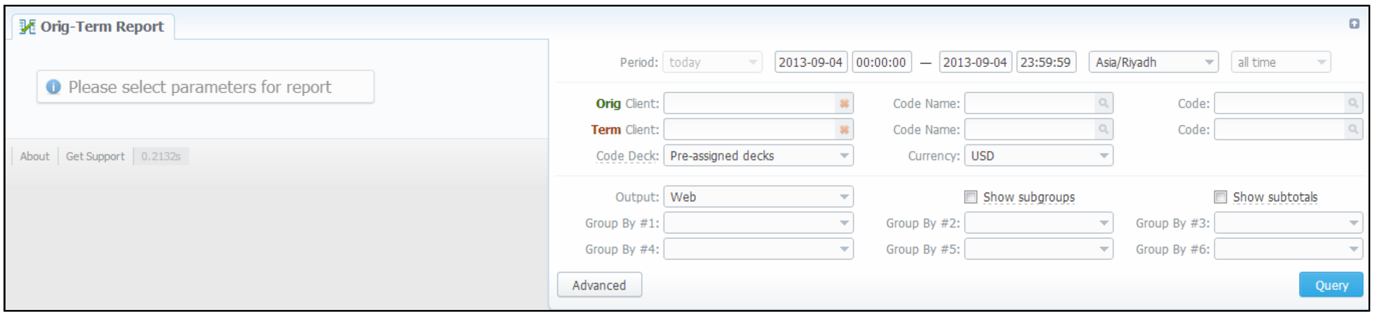
Orig-Term Report

On this page

Orig-Term Report Section Main Window

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).

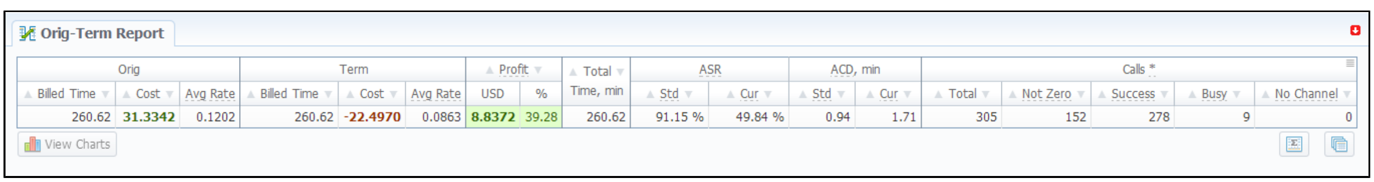
Screenshot: Orig-Term Report search form



Creating Orig-Term Report

To create a report you need to specify a period, and also specify the report group parameters in *"Group by #"* fields. 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.

Screenshot: Orig-Term Report section



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:

<table>
<tr><th>Column</th><th colspan="2">Description</th></tr>
<tr><td rowspan="2">Orig</td><td colspan="2">Origination info</td></tr>
<tr><td>Billed Time</td><td>Billed call time</td></tr>
</table>

	• ***Cost***	Call cost
	• ***Avg. Rate***	Average call rate
Term	Termination info	
	• ***Billed Time***	Billed call time
	• ***Cost***	Call cost
	• ***Avg. Rate***	Average call rate
Profit	The revenue	
	• ***USD***	Revenue in USD (in fact, any system currency can be displayed here. In this example system currency = USD)
	• ***%***	Revenue in percent value
Total Time, min	Total calls time	
ASR	average successful rate (successful calls percentage)	
	• ***Std***	Number of calls with status "success" divided by total number of calls minus all calls with “no channel available” status
	• ***Cur***	Number of calls with duration > 0 divided by total number of calls
ACD, min	Average call duration	
	• ***Std***	Sum of all calls durations divided by number of calls with status "success"
	• ***Cur***	Sum of all calls durations divided by number of calls with duration > 0
Calls	Quantity of calls in database	
	• ***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
	• ***Busy***	“Busy” calls quantity
	• ***No Channel***	No circuit / channel available

Profit Report

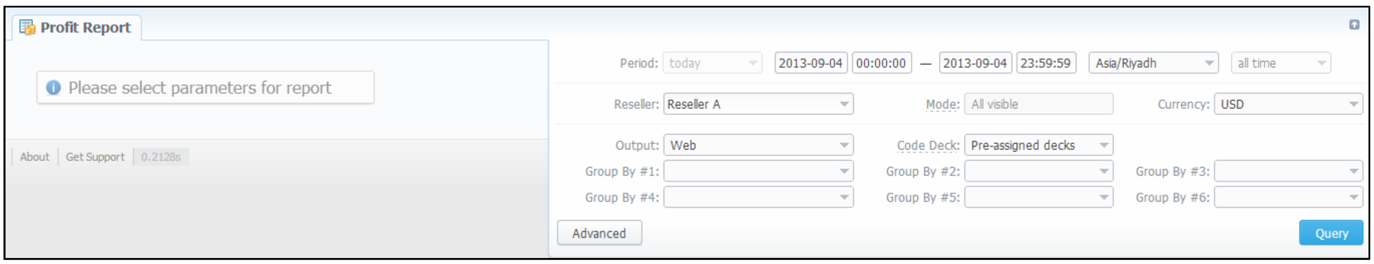
On this page

Profit Report Section Main Window

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).

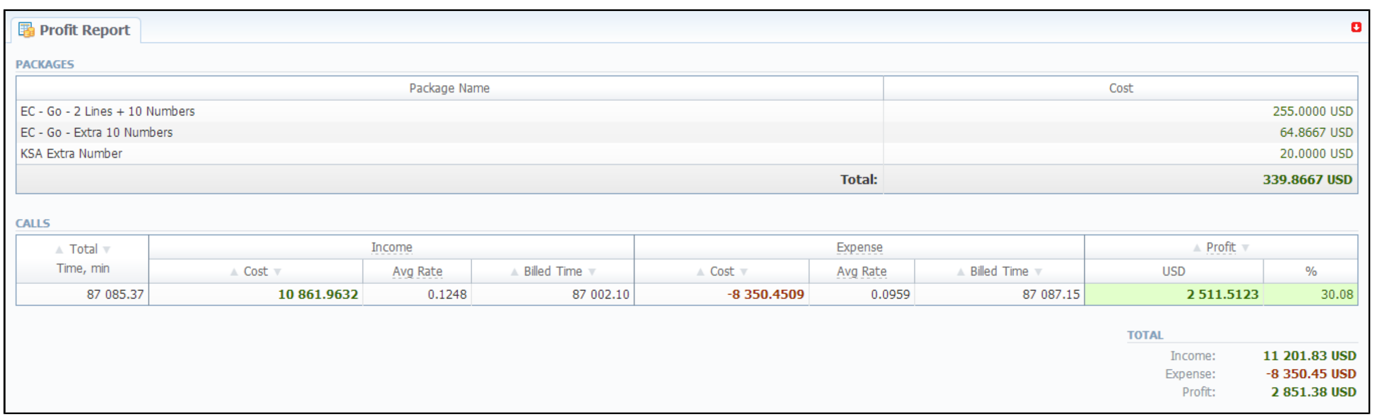
Screenshot: Profit Report search form



Creating Profit Report

Profit Report consists of two parts (*"Packages"* and *"Calls"*) and looks like on screenshot below.

Screenshot: Profit Report section



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
	• ***Avg. Rate***	Average call rate
	• ***Billed Time***	Billed call time
Profit	The revenue	
	• ***USD***	Revenue in USD (in fact, any currency can be displayed here)
	• ***%***	Revenue in percent value

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

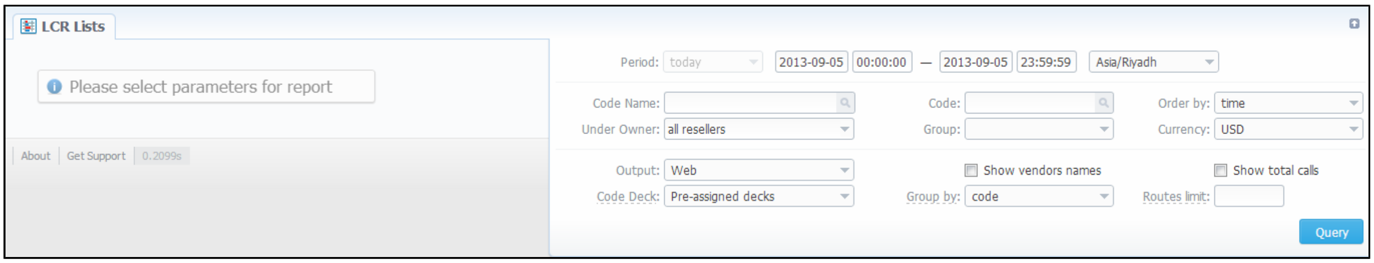
LCR Lists

On this page

LCR Lists Section Main Window

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



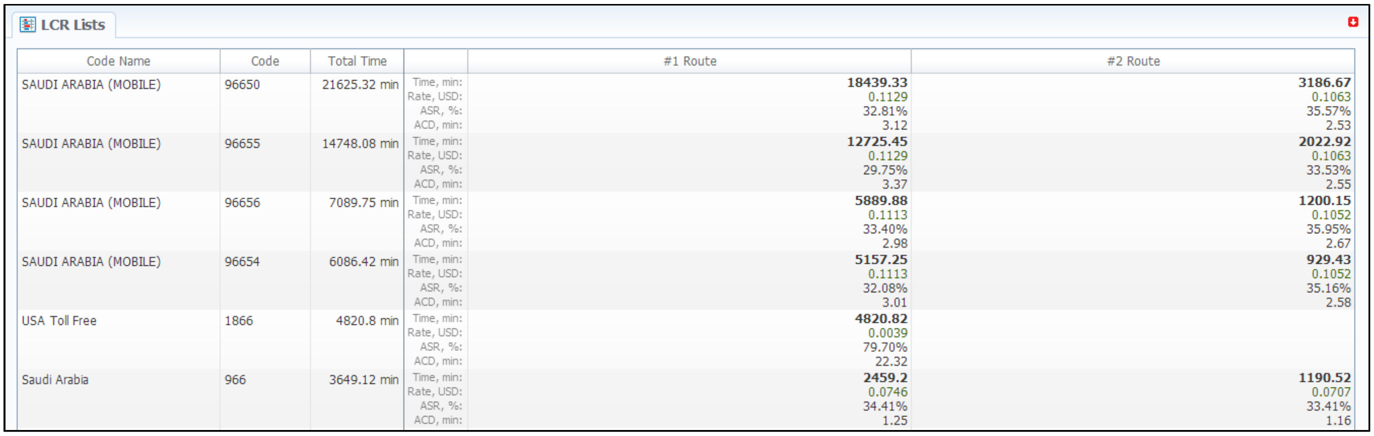
Forming LCR List

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 *Code Name* 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 (Screenshot).

Screenshot: Traffic usage list



LCR Lists

Code Name	Code	Total Time		#1 Route	#2 Route
SAUDI ARABIA (MOBILE)	96650	21625.32 min	Time, min: Rate, USD: ASR, %: ACD, min:	**18439.33** 0.1129 32.81% 3.12	**3186.67** 0.1063 35.57% 2.53
SAUDI ARABIA (MOBILE)	96655	14748.08 min	Time, min: Rate, USD: ASR, %: ACD, min:	**12725.45** 0.1129 29.75% 3.37	**2022.92** 0.1063 33.53% 2.55
SAUDI ARABIA (MOBILE)	96656	7089.75 min	Time, min: Rate, USD: ASR, %: ACD, min:	**5889.88** 0.1113 33.40% 2.98	**1200.15** 0.1052 35.95% 2.67
SAUDI ARABIA (MOBILE)	96654	6086.42 min	Time, min: Rate, USD: ASR, %: ACD, min:	**5157.25** 0.1113 32.08% 3.01	**929.43** 0.1052 35.16% 2.58
USA Toll Free	1866	4820.8 min	Time, min: Rate, USD: ASR, %: ACD, min:	**4820.82** 0.0039 79.70% 22.32	
Saudi Arabia	966	3649.12 min	Time, min: Rate, USD: ASR, %: ACD, min:	**2459.2** 0.0746 34.41% 1.25	**1190.52** 0.0707 33.41% 1.16

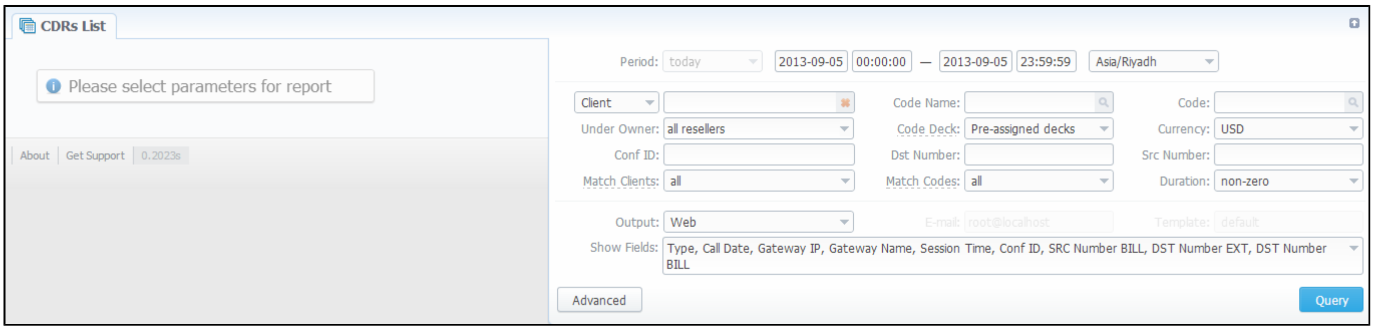
CDRs List

On this page

CDRs List Section Main Window

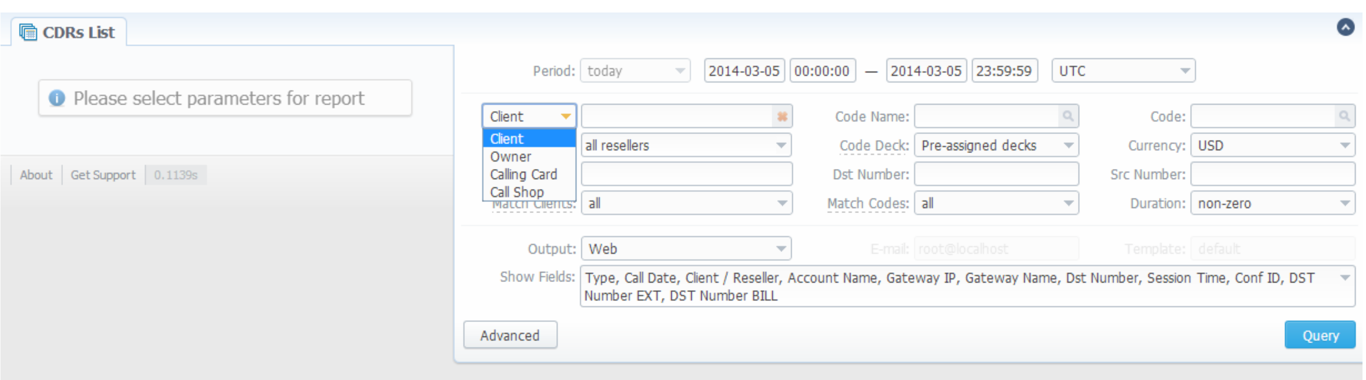
This section allows you to form a detailed calls statistics on each client with description of every call parameter. Main window represents a search form similar to those of other reports (Screenshot):

Screenshot: CDRs List search form



CDRs report can be queued for 4 billing units: *Client, Owner, Calling Cards* and *Call Shops*.

Screenshot: All types of client in CDRs Report.



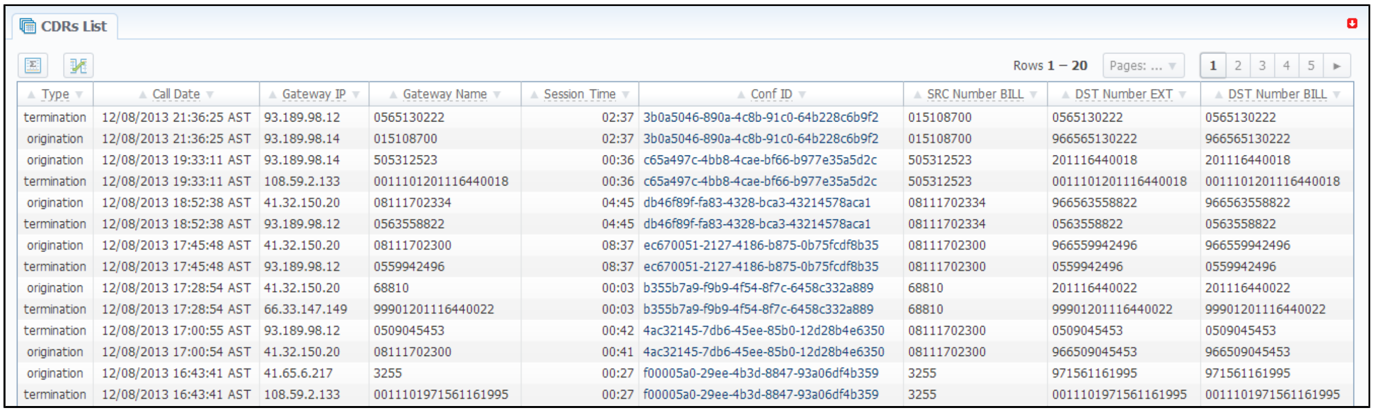
> ⚠ If report is queued for *Reseller (Owner)* so the *Reseller Billing Mode* should be configured. To configure it just insert rate tables in Reseller's Setting Panel.

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	Gateway Name	Session Time	Conf ID	SRC Number BILL	DST Number EXT	DST Number BILL
termination	12/08/2013 21:36:25 AST	93.189.98.12	0565130222	02:37	3b0a5046-890a-4c8b-91c0-64b228c6b9f2	015108700	0565130222	0565130222
origination	12/08/2013 21:36:25 AST	93.189.98.14	015108700	02:37	3b0a5046-890a-4c8b-91c0-64b228c6b9f2	015108700	966565130222	966565130222
origination	12/08/2013 19:33:11 AST	93.189.98.14	505312523	00:36	c65a497c-4bb8-4cae-bf66-b977e35a5d2c	505312523	201116440018	201116440018
termination	12/08/2013 19:33:11 AST	108.59.2.133	0011101201116440018	00:36	c65a497c-4bb8-4cae-bf66-b977e35a5d2c	505312523	0011101201116440018	0011101201116440018
origination	12/08/2013 18:52:38 AST	41.32.150.20	08111702334	04:45	db46f89f-fa83-4328-bca3-43214578aca1	08111702334	966563558822	966563558822
termination	12/08/2013 18:52:38 AST	93.189.98.12	0563558822	04:45	db46f89f-fa83-4328-bca3-43214578aca1	08111702334	0563558822	0563558822
origination	12/08/2013 17:45:48 AST	41.32.150.20	08111702300	08:37	ec670051-2127-4186-b875-0b75fcdf8b35	08111702300	966559942496	966559942496
termination	12/08/2013 17:45:48 AST	93.189.98.12	0559942496	08:37	ec670051-2127-4186-b875-0b75fcdf8b35	08111702300	0559942496	0559942496
origination	12/08/2013 17:28:54 AST	41.32.150.20	68810	00:03	b355b7a9-f9b9-4f54-8f7c-6458c332a889	68810	201116440022	201116440022
termination	12/08/2013 17:28:54 AST	66.33.147.149	99901201116440022	00:03	b355b7a9-f9b9-4f54-8f7c-6458c332a889	68810	99901201116440022	99901201116440022
termination	12/08/2013 17:00:55 AST	93.189.98.12	0509045453	00:42	4ac32145-7db6-45ee-85b0-12d28b4e6350	08111702300	0509045453	0509045453
origination	12/08/2013 17:00:54 AST	41.32.150.20	08111702300	00:41	4ac32145-7db6-45ee-85b0-12d28b4e6350	08111702300	966509045453	966509045453
origination	12/08/2013 16:43:41 AST	41.65.6.217	3255	00:27	f00005a0-29ee-4b3d-8847-93a06df4b359	3255	971561161995	971561161995
termination	12/08/2013 16:43:41 AST	108.59.2.133	0011101971561161995	00:27	f00005a0-29ee-4b3d-8847-93a06df4b359	3255	0011101971561161995	0011101971561161995

Selecting Displayed Report Fields

Fields that will be displayed in report can be selected from *"Show fields"* list in search form. By *"Ctrl"-left click* you can select single values, and by *"Shift"-left click* – a group of values is selected. 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
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

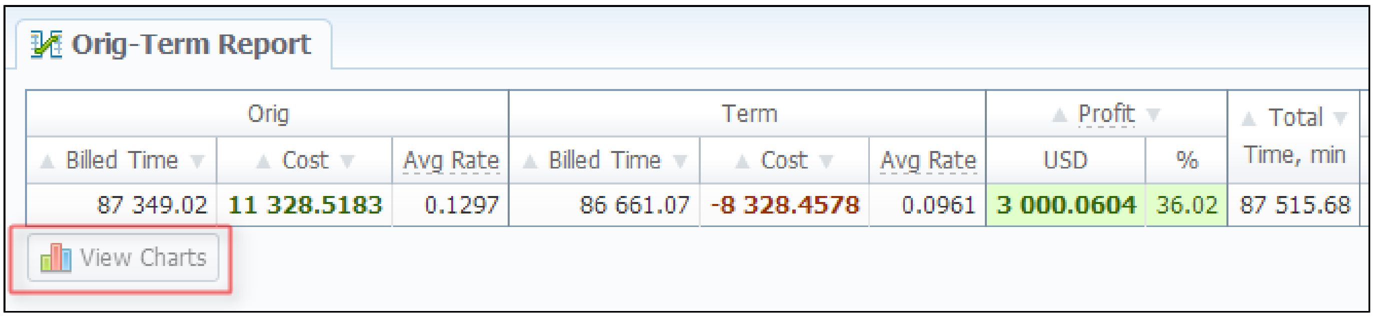
Graphical Charts in Statistics

On this page

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



Graphycal Charts Window

The set of graphical charts consists of the following ones: *Total Cost, Total/Billed Time, ASR, ACD, Calls Count and Income/Expence/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

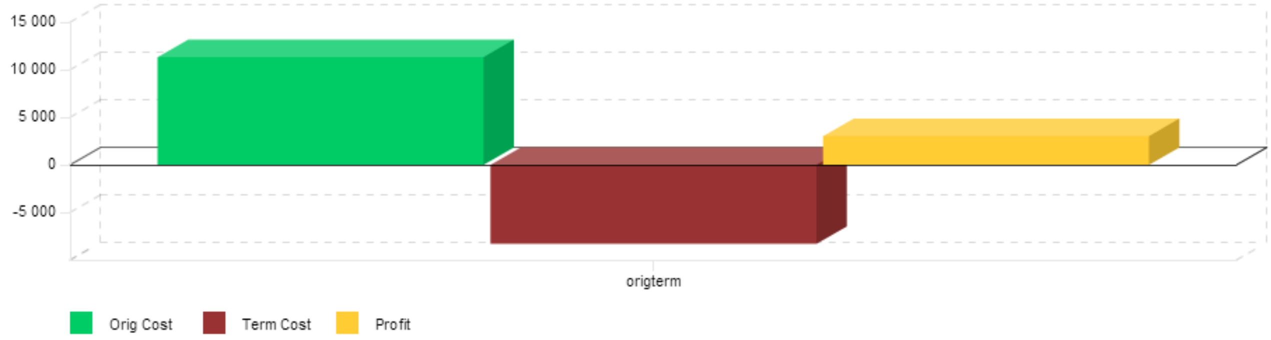


chart by amCharts.com

Time (Total / Billed) origination

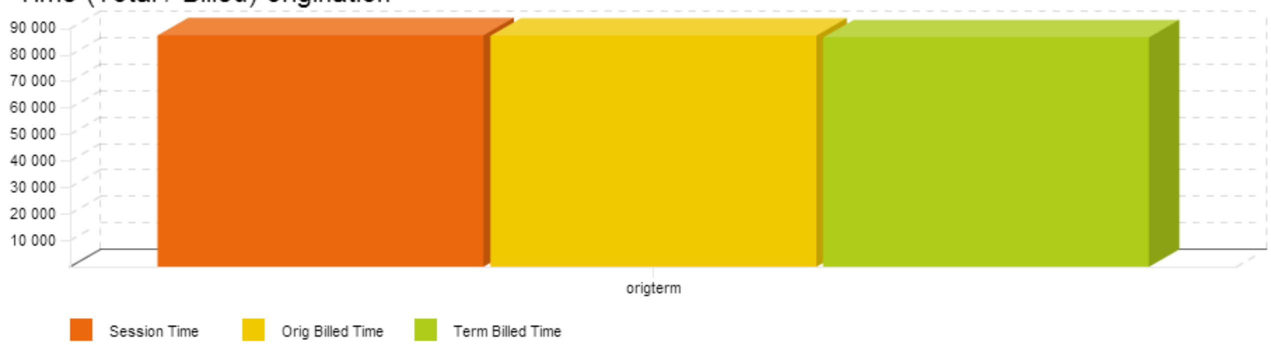


chart by amCharts.com

ASR, %

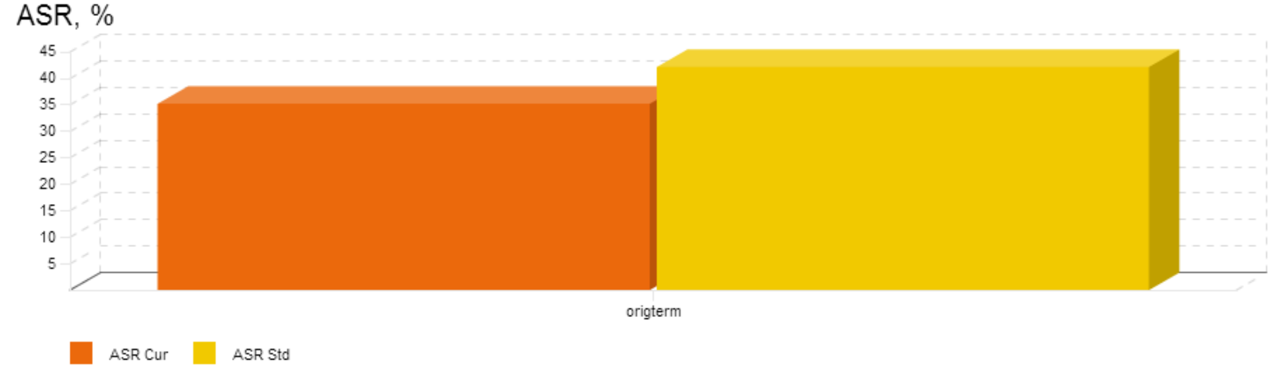


chart by amCharts.com

ACD, %

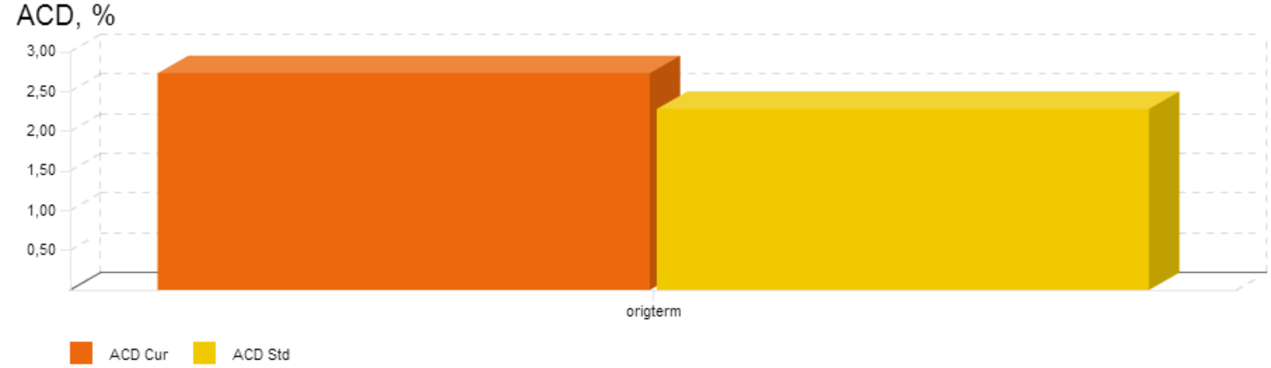
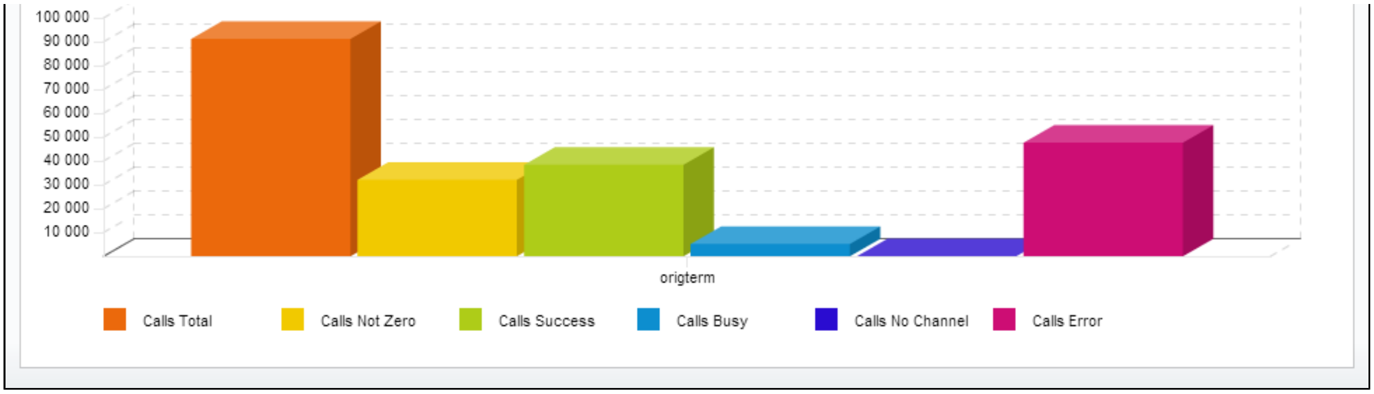


chart by amCharts.com

Calls Count



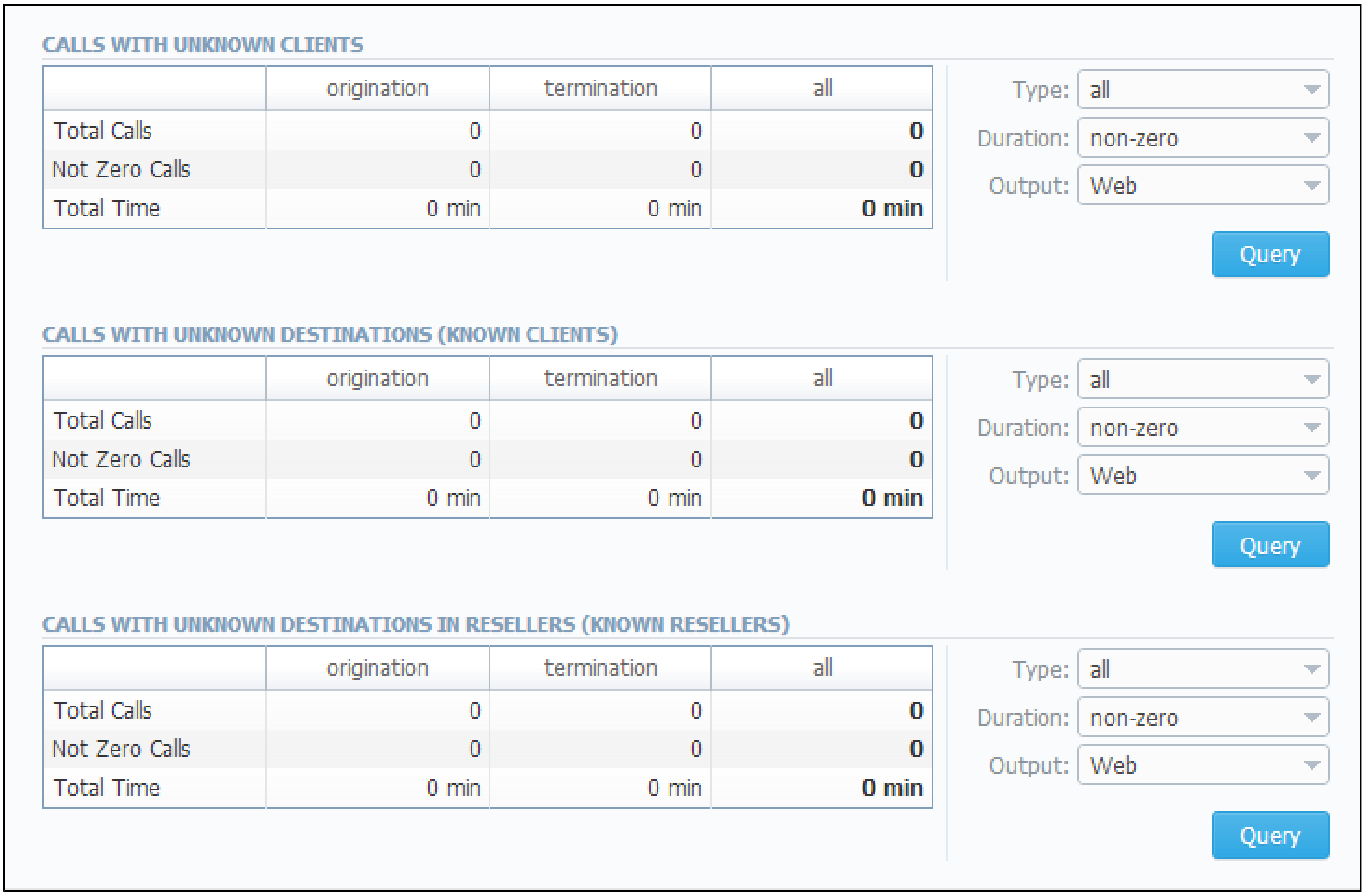
100 000
90 000
80 000
70 000
60 000
50 000
40 000
30 000
20 000
10 000
origterm
Calls Total
Calls Not Zero
Calls Success
Calls Busy
Calls No Channel
Calls Error

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



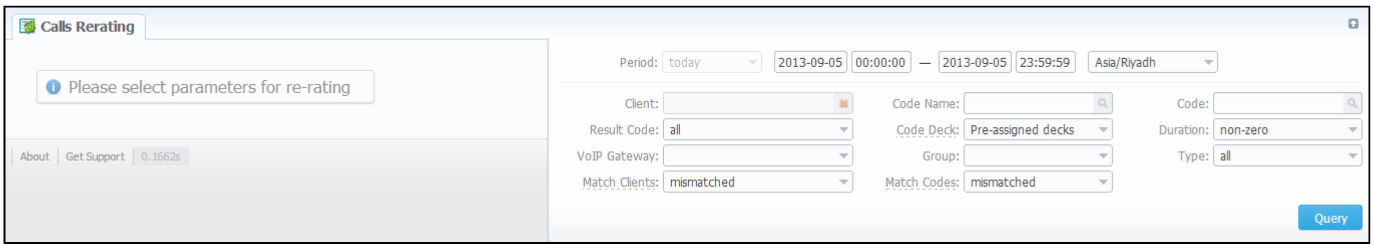
Calls Rerating

On this page

Calls Rerating Section Main Window

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



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 reration 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 reration query with large chunks of information (for example, rerating 3 million of calls at once is not recommended).

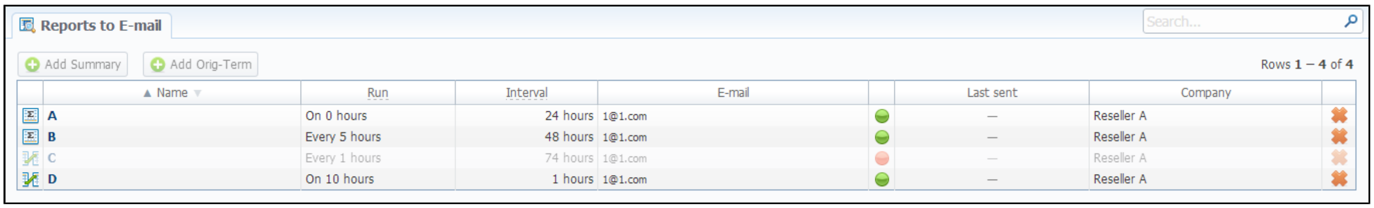
Reports to E-mail

On this page

Reports to E-mail Section Main Window

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



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.*

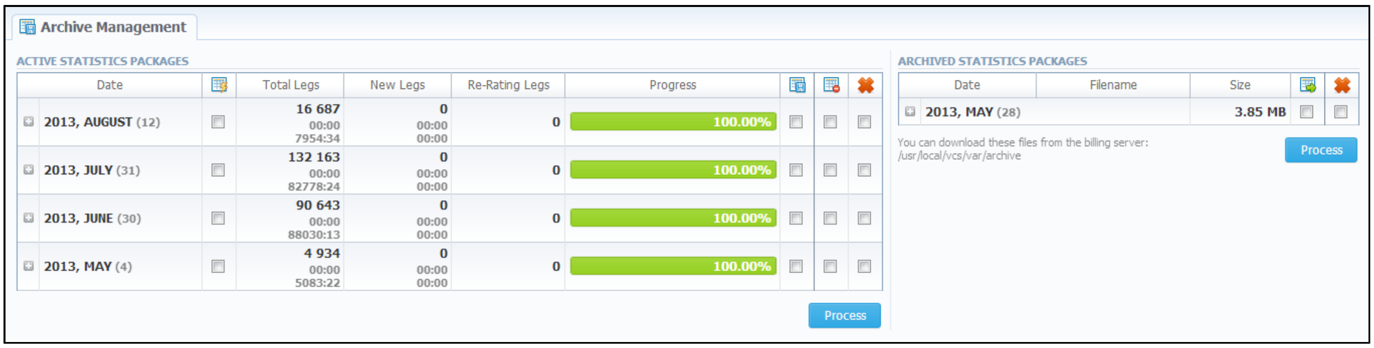
Archive Management

On this page

Archive Management Section Main Window

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

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 calls quantity
New Legs	Quantity of calls that have not been processed yet
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
	Updates selected package to latest database format (useful after system update to new version)
	Moves package to archive
	Deletes package from database *without* performing balance rollback
	Deletes package from database *with* 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 keeped 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.

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:

- Rates Management Details
- Active Calls
- Factors Watcher

Rates Management Details

This section will describe everything that concerns the rates management tools of JeraSoft VoIP Carrier Suite, which are provided by Rates Management Module.

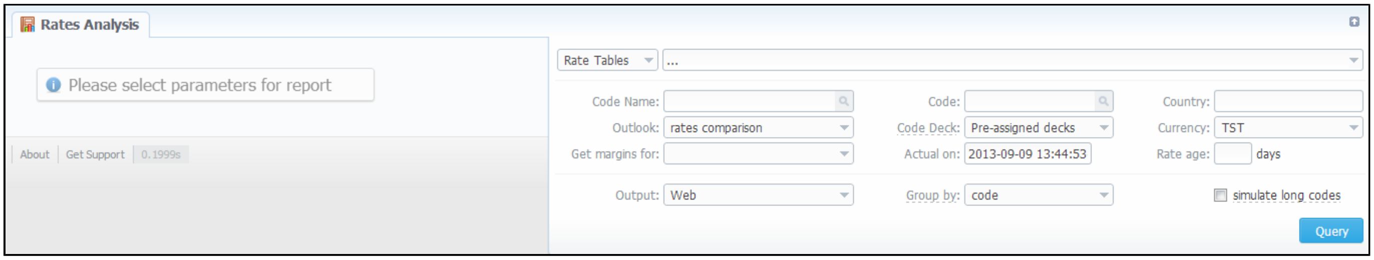
VCS Rates Management Module provides you with advanced features that allow you to analyze, compare and create rate sheets within VCS's web-interface without use of any third-party software. These features are grouped under *Tools* section and are named Rates Generator and Rates Analysis.

Also, you can check our Useful Tips, that will help you to provide more useful and comfortable Rates Management.

Rates Analysis

This section is designed to analyze rates that are currently present in the system. Main window looks like a search form (Screenshot):

Screenshot: Rates Analysis section search form



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

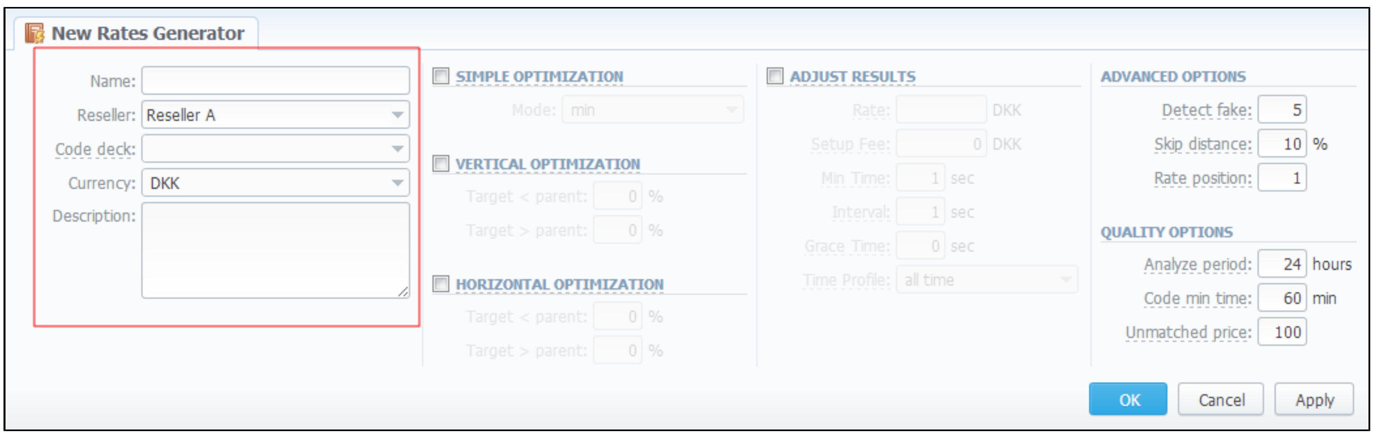
On this page

Adding New Rates Generator Query

Rates Generator is a useful tool when you need to create a price list from data taken from multiple sources, such as another rate sheets or your provider's rate tables. You can do that and more, if you use following instructions.

The price list is created by running a set of code picker rules that are stored in a preset. To create new preset, go to *Tools – Rates Generator* section and press *«New Rates Generator»* button. Set name and reseller for the preset and press *«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 below):

Screenshot: Configuring Rates Generator query



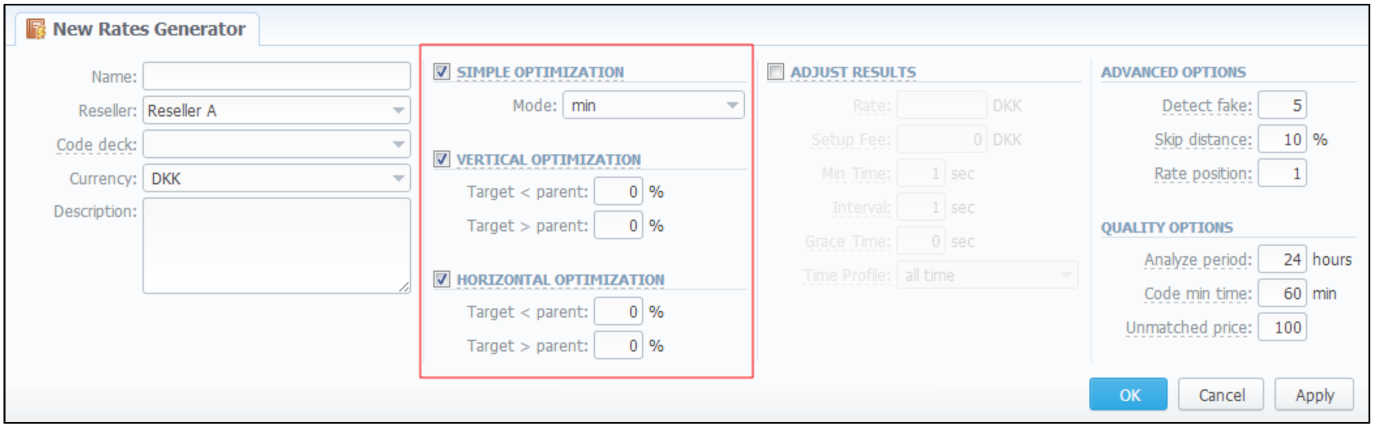
Field	Description
Name	Name of rate table that should be created or updated
Reseller	Specify reseller to whom newly created rate table should belong
Code Deck	Select a code deck that will be used to search for codes in source and name destination codes in new price list
Currency	Specify the currency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

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 checkboxes

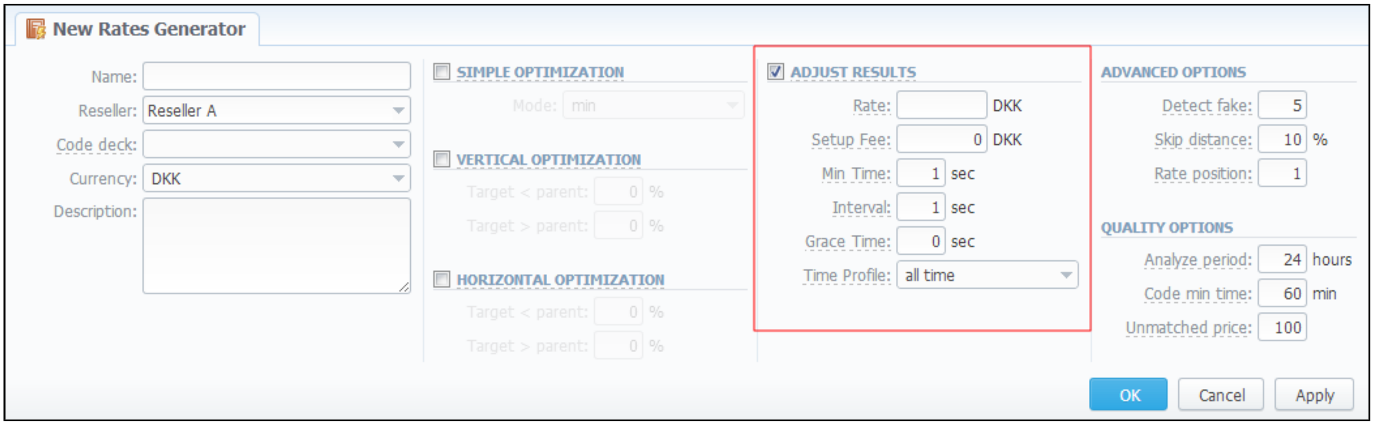


Checkbox	Description	
Simple Optimization	Applies same price for all codes inside same code name by using three options	
	• ***min***	minimal available price
	• ***max***	maximal available price
	• ***avg***	average price of all available
Vertical Optimization	Enables merging of longer codes into shorter ones, if respective rates satisfy *Target < Parent* and *Target > Parent* settings	
	• ***Target < Parent***	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
	• ***Target > Parent***	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
Horizontal Optimization	Enables application of same rate to codes of same lengths, which belong to the same code name, if respective rates satisfy *Target < Parent* and *Target > Parent* settings	
	• ***Target < Parent***	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
	• ***Target > Parent***	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

Adjust Options

"Adjust Results" checkbox 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.

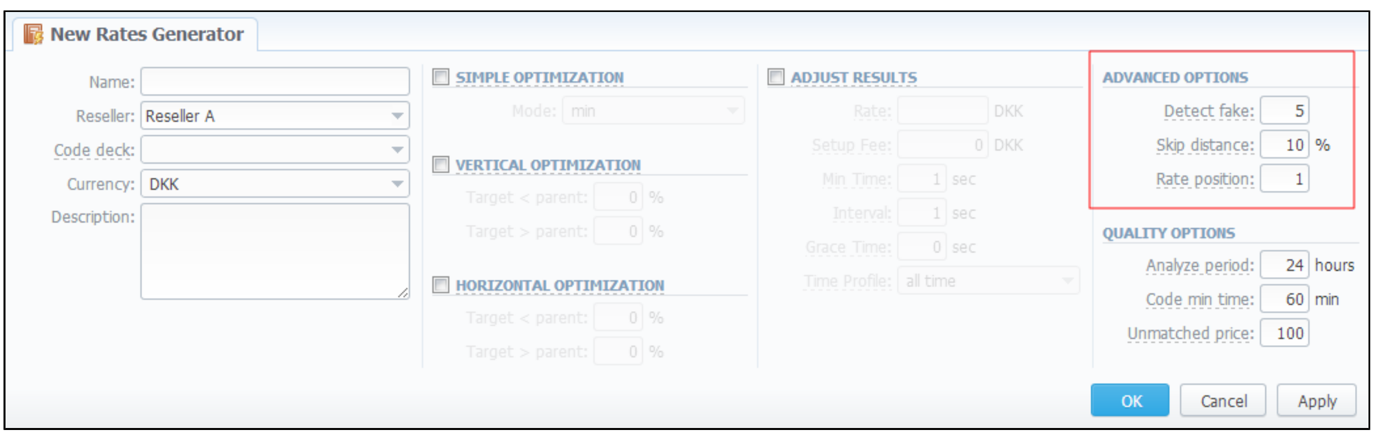
Screenshot: "Adjust Results" checkbox



Field	Description
Rate	Define a rate for codes which are present in code deck, but were not provided by your rules, when performing *Adjust results*
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

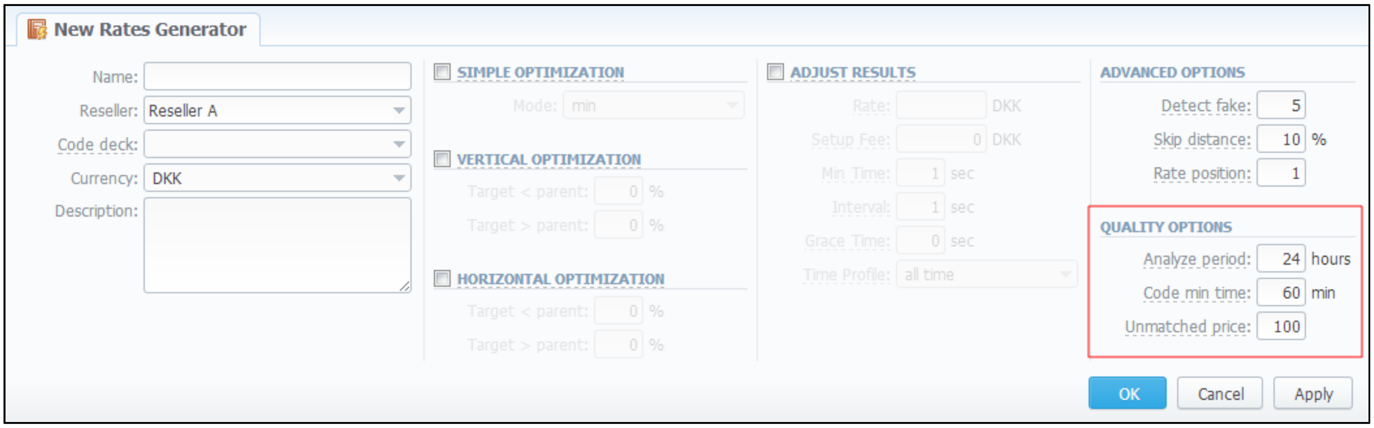


Field	Description
Detect fake	Enable detection of fake rates if at least specified number of rates is present. The mechanism is following: if you enter “3” and your rules provided you with 3 different rates for some destination, the cheapest rate will be compared to the direct average of those 3 rates. If the difference is more, than provided in *Skip distance*, then rate is considered fake and removed from result

Skip distance	A percentage value of difference between current rate and direct average when performing *Detect fake*
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

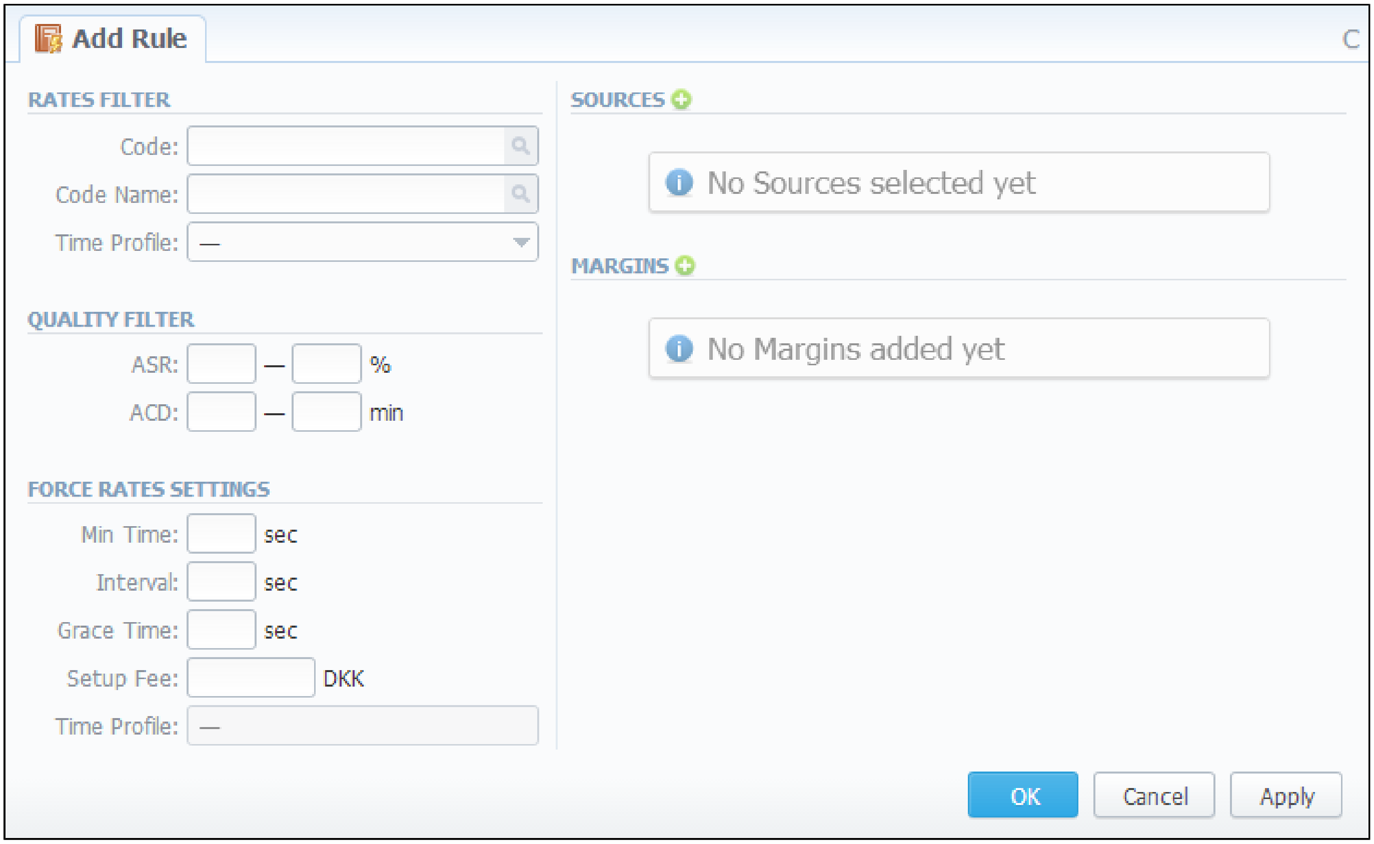


Field	Description
Analyze period	Define a number of hours to analyze for picking ACD and ASR quality
Code min time	Define a number of minutes that should be available for each code that satisfies quality parameters
Unmatched price	Define price for all codes which do not satisfy quality parameters

Adding New Rule

After pressing "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



Section	Fields And Description	
Rates Filter	Set basic parameters of your rule here	
	• ***Code***	Pick a code for current rule
	• ***Code Name***	Pick group of codes for current rule
	• ***Time Profile***	Select a time profile for codes that will be picked from sources
Quality Filter	Set quality parameters of your rule here	
	• ***ASR, %***	Specify ASR ranges that should be used when picking destinations from sources
	• ***ACD, min***	Specify ACD ranges that should be used when picking destinations from sources
Force Rates Settings	Specify additional parameters that should be noted when picking destinations from sources (*Setup Fee, Min. Time, Interval, Grace Time, etc.*)	
Sources	Select one or multiple sources for picking data for new price list (set-by-step setting of this section you will find below)	
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 *Pro vider 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.

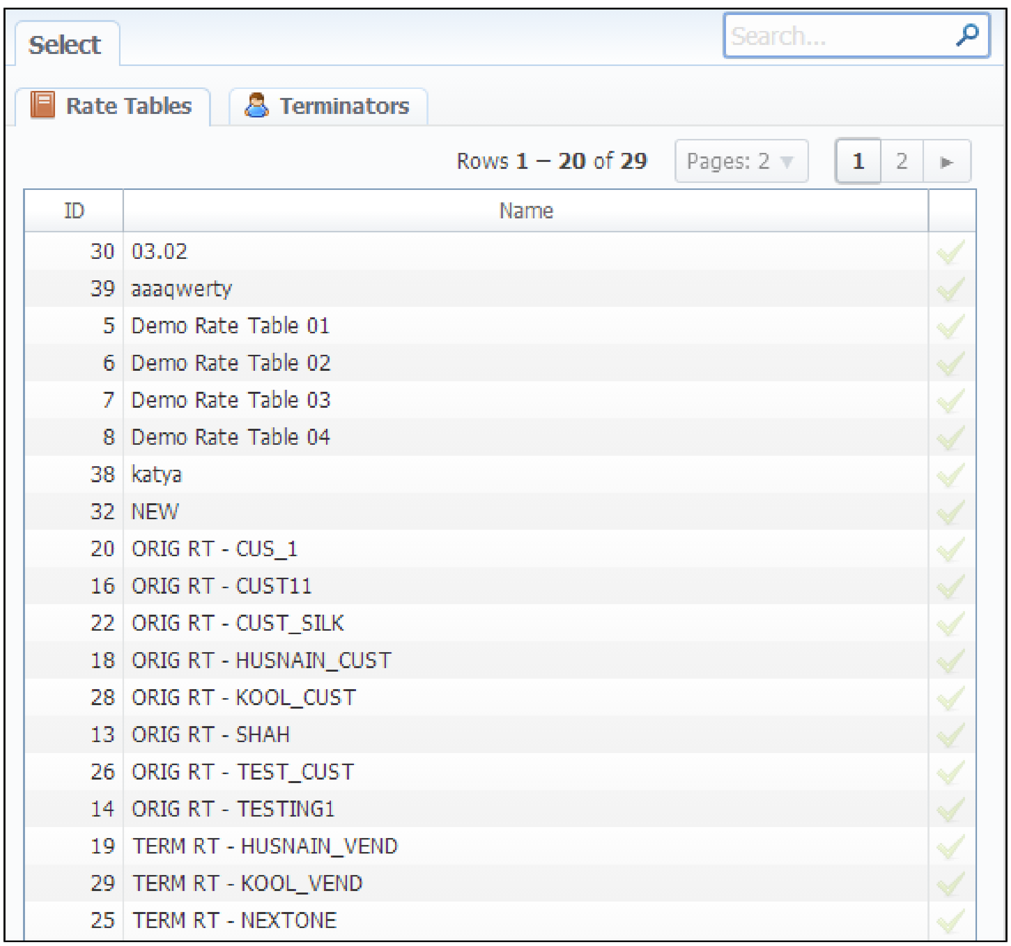
Tip: You can drag rules to change priority.

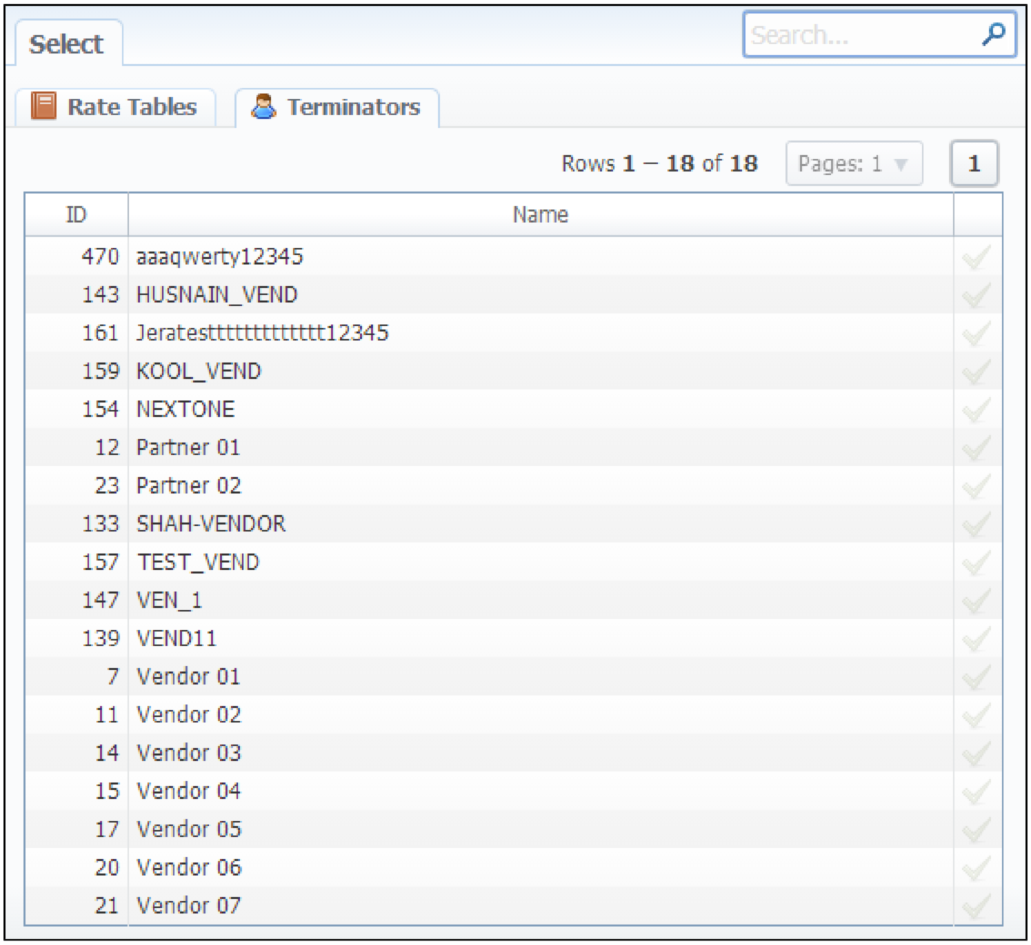
Adding Source to the Rule

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 in the pop-up *"Select"* window click on the *"Terminators"* or *"Rate Tables"* tab (depends on what kind of source you need) and select an appropriate terminator or rate table from the list (Screenshots below):

Screenshot: "Rate Tables" tab in "Select" window

Screenshot: "Terminators" tab in "Select" window





ID	Name
470	aaaqwerty12345
143	HUSNAIN_VEND
161	Jeratesttttttttttttt12345
159	KOOL_VEND
154	NEXTONE
12	Partner 01
23	Partner 02
133	SHAH-VENDOR
157	TEST_VEND
147	VEN_1
139	VEND11
7	Vendor 01
11	Vendor 02
14	Vendor 03
15	Vendor 04
17	Vendor 05
20	Vendor 06
21	Vendor 07

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

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

Useful Tips

On this page

Billing by Access Numbers

Rates Management module has the ability to apply additional Extra Rate to destinations. This is useful for easy and proper billing by access numbers. This function is available through *Rate Tables* section. To apply Extra Rates to customer traffic you need to do the following:

- Go to *Configuration – Client Groups* and create a group of *Orig Traffic* type named *Toll Free Group*;
- Go to *Management – Clients* and open customer's presets tab;
- Find *Traffic Processing* and perform a translation of Orig type, which says the following: in case call comes from defined access number (use *Src Match*field), put this call into *Toll Free Group*;
- Open Rate Table of this customer, go to *Extra* tab and apply extra rate for all calls in *Toll Free Group*.

Automatic Rates Notifications (Addendums)

This will allow you to send rate changes to your customers within VCS' interface. In short – if your customer's rate table is updated by some means, system will automatically generate and send notification e-mail to that customer with information which rates were increased/decreased/closed etc.

Here is how you can set Rate Addendum notification for one of your particular customers:

- Go to *Management – Clients* and open your customer's properties page;
- Find *"Rate Notification"* box and enable it;
- Don't forget to specify notification parameters: "Format" of the attachment with rate details, "Notify type" for displaying full current price list, or changed rates only, and "Last Notified for" – day when system notified your customer last time (this date is used to get actual updates to rate table by system). Finally, *"Notify Now"* button allows you to generate and send such notification manually.

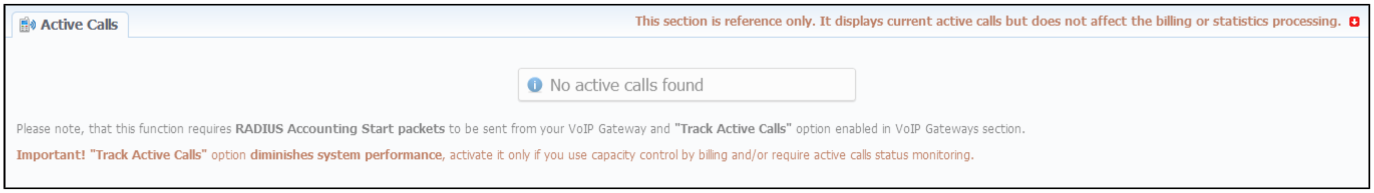
In general, setting this tool to work is as simple, as *Autoinvoicing.*

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



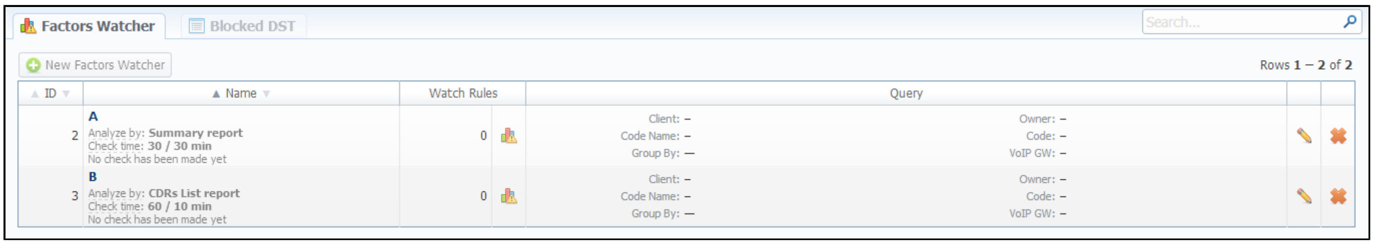
Factors Watcher

On this page

Factors Watcher Section Main Window

This section represents built-in monitoring tool, that watches over different parameters and generates alerts if some conditions are met. Main section window looks like on Screenshot:

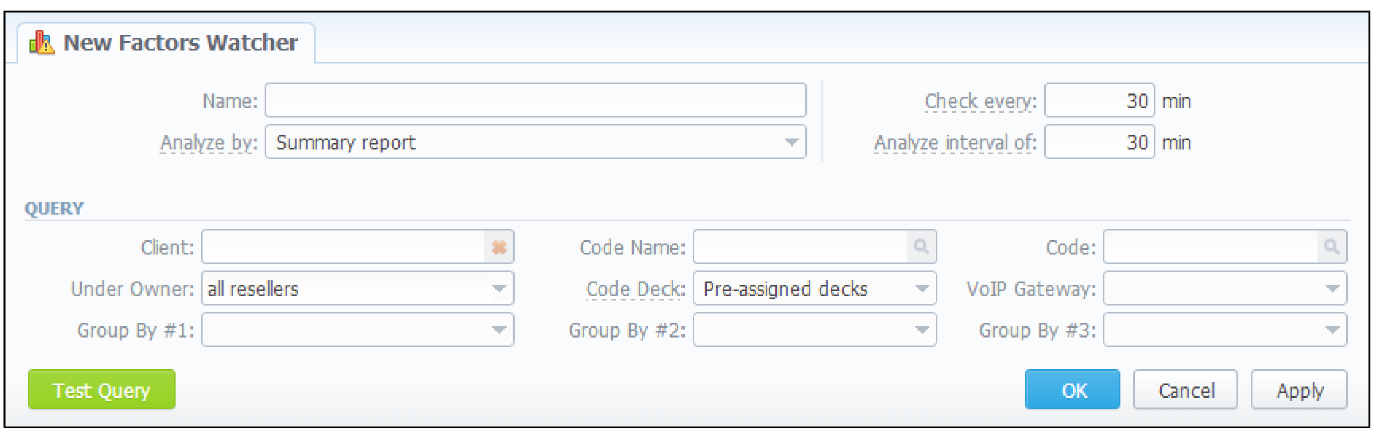
Screenshot: Factors Watcher section main window



Creating New Query

The tool workout is based on periodical queries of statistic information. To create a new query press *"New Factors Watcher"* button. You'll need to specify next parameters in a new window (Screenshot below):

Screenshot: Adding new Factors Watcher query



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, *CDRs List* allows you to manipulate with phone numbers, while *Summary* allows such operations with ACD and ASR

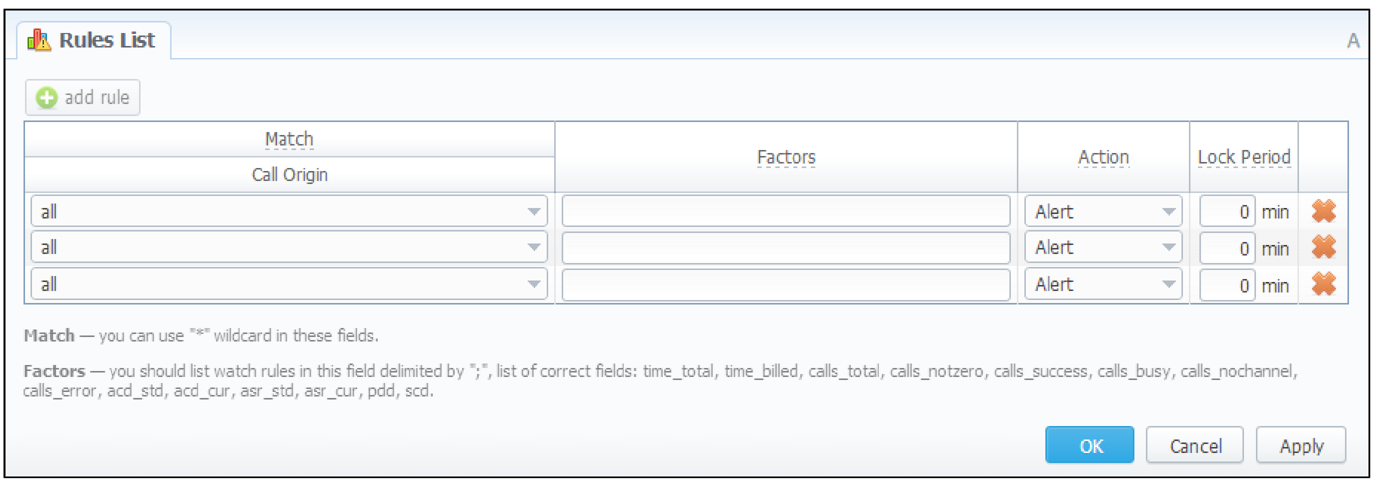
Check every, min	How often to perform checks
Analyze interval of, min	What interval of time to check
Client	Select a client
Code Na me	Select a code group
Code	Specify the code
Under Owner	Specify a Reseller
Code Deck	Select a code deck to pull code names from
VoIP Gateway	Select a VoIP gateway
Group by #	Group query by selectable parameter (client, account, code group, code or VoIp gateway)
***"Test Query"* Button**	Press this button to test your query as *Summary Report or CDRs List* 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 pressing 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 click on Query name or icon. In new window (Screenshot down below) press *"add rule"* button and fill the set of fields to specify the appropriate rule.

Screenshot: Editing Factors Watcher rules



The set of rules depends on how many parameters you defined in *"Group by #"* fields when current query was created. For example, if you defined a client in query, you will be able to configure clients in watcher rules, etc. Here is the full list of possible configurable fields:

Field	Description
Match	A set of parameters that are used as base for checks

	• ***Call Origin***	Type of route to check (origination, termanation or both)
	• ***Client***	What client to apply rules to
	• ***Account***	What account to apply rules to
	• ***Code Group***	What code group to apply rules to
	• ***Code***	What code to apply rules to
	• ***VoIP Gateways***	What VoIP gateway to apply rules to
Factors	Factors that are applied to current rule. Rules must be listed with delimiting symbol *";"*. Correct list of rules: *time_total, time_billed, calls_total, calls_notzero, calls_success, calls_busy, calls_nochannel, calls_error, acd_std, acd_cur, asr_std, asr_cur, pdd, scd.* For example, if you enter " *time total* > *100"* 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 rule match is found	
Lock Period	If action was block of number, destination or code, then define duration of that block in this field	

Routing Details

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

Introduction to VCS Routing Module

JeraSoft VCS is able to provide so-called Dynamic Routing features, also often called External Routing. Depending on your preferred switch manufacturer, VCS is able to utilize these functions via RADIUS Protocol or SIP Redirect Server. To find out more, regarding possible options for your switch manufacturers, please consult VCS Integration Manual or contact JeraSoft Support.

In VCS, Dynamic Routing works based on three principles: Routing Plans, Routing Policies and Routing Table generation. So, how can you set it working? A few easy steps:

Step 1: You need to create so-called Routing Plan, which consists of 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 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), wait a little bit till Routing Table is created and you are all set!

Please check the subsections below to get more detailed information regarding JeraSoft VCS Routing Module. Main module instruments can be found in *R outing* section of the system, which will appear if module is activated.

- Routing Plans
- Routing Presets
- Routing Analysis
- Dynamic Routing Policies
- Dynamic Routing Table
- Routing Useful Tips

Routing Plans

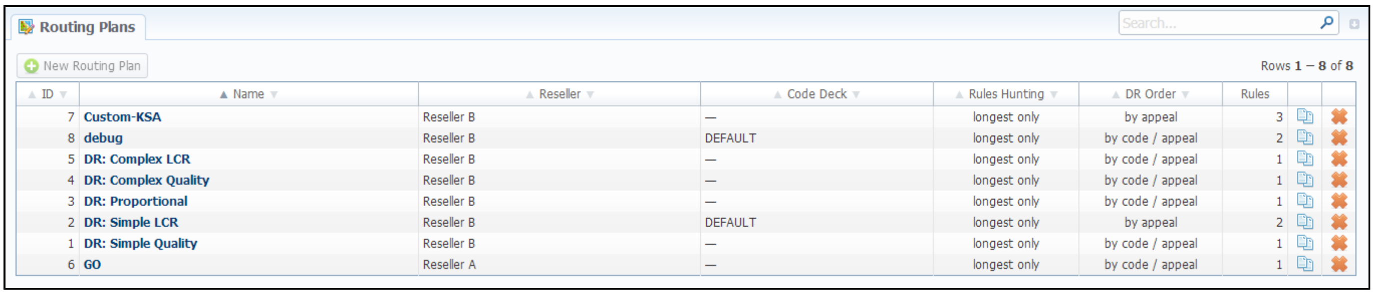
On this page

Routing Plans Section Main Window

Routing Plans section becomes accessible if Routing Module is enabled in your JeraSoft VCS installation. To access *Routing Plans* section, please log in to your system and go to *Routing – Routing Plans*.

Routing Plans is something that manages your routing rules for your customers, providers and destinations. Each routing plan should be assigned to a respective customer (originator) for routing to work. While creating routing plan you are able to combine dynamic and static routing rules and assign separated rules for each and every of your destinations. To add new routing plan, simply click on *«New Routing Plan»* button and fill the following (Screenshot):

Screenshot: Routing Plans section main window



Column	Description	
ID	Your routing plan ID	
Name	A name for your 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	
	• ***longest only***	Routing will find only the longest matching code and will stop looking for shorter codes that comply to routing rule otherwise
	• ***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: *by appeal* – routes will be sorted in accordance to their resulting appeal value; *by code / appeal* – routes will be grouped by codes and then sorted by appeal value	
	• ***by appeal***	Routes will be sorted in accordance to their resulting appeal value
	• ***by code / appeal***	Routes will be grouped by codes and then sorted by appeal value

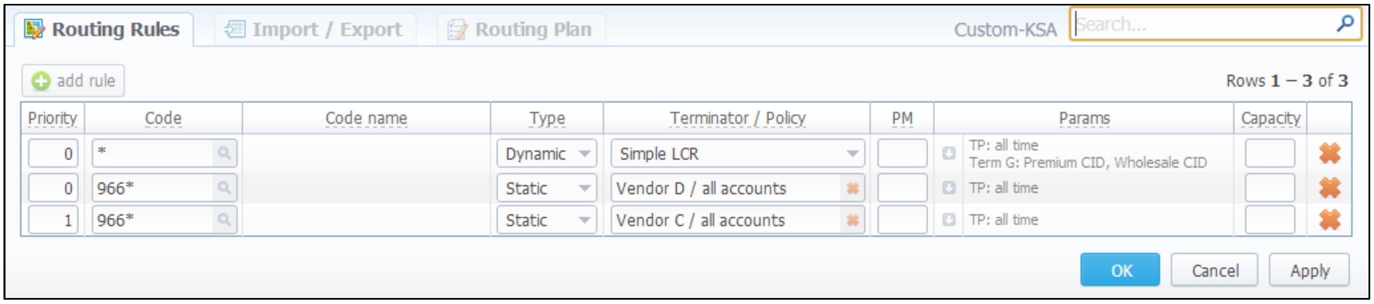
Rules	An amount of rules, which refers to the respective routing plan

This concludes creation of routing plan.

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



Field	Description
Priority	Define a priority of rules execution, if they have similar code or code name specified
Code	Enter a code which will be used in current routing rule, use * as wildcard
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 dynamic or static type or routing for current rule
Terminator / Policy	If you selected static for type, you may specify a terminator here; if you selected dynamic for type, specify routing policy for current rule
PM	Define a *Profit Margin* value for current rule here
Params	A number of additional parameters available here. You may define time profile for the rule here, allowed phone number length and routing to/for specific routing groups (for dynamic rules)
Capacity	Limit capacity for current rule (leave blank for unlimited)

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.

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.

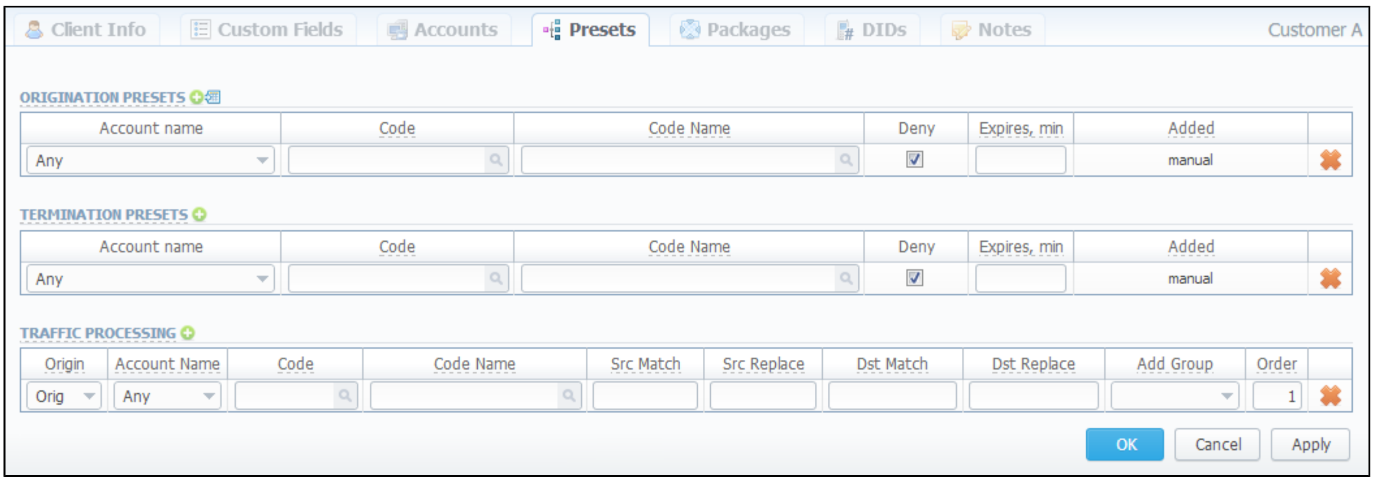
Routing Presets

On this page

Routing Presets Contents

Routing Presets is additional instrument that you may use to block codes or whole destinations while doing Dynamic Routing. Routing Presets are accessible through *Management – Clients* section, by clicking on icon next to specific client name. When you click it, you will see the following window:

Screenshot: Routing presets contents



There, you are able to add origination and termination presets, to block desired destination or code by clicking on *«Deny»* box. Also, the same window allows you to 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.

Please browse the full list of fields and descriptions of the routing presets window below.

Adding Routing Presets

To add a route press icon near *"Origination"* and / or *"Termination"* presets and 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 here (use * as wildcard)
Code Name	Or select a destination name in this field if applicable
Deny	Enable this to deny current route selection
Expires, min	Set a duration in minutes, for which the block should be active (leave blank to block forever)
Added	When and how the rule was originally added • ***manual*** — Added using this section

	• ***auto***	Added by Factors Watcher

Tip: 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.

Performing Number Translation

To perform a number translation, press icon near *"Traffic Processing"* rubric and fill the following fields:

Field Name	Field Description	
Origin	Specifies, when current translation rule will be applied	
	• ***ORIG***	For calls originated from a client
	• ***TERM***	For calls terminated to a client
	• ***DR***	On Dynamic Routing, before sending calls to a terminator
Account Name	Select a respective account here	
Code	Specify a code of destination here (use * as wildcard)	
Code Name	Or select a destination name in this field if applicable	
Src Match	In this field you may set a template by which a number will be analyzed, and if template matches the number, the translation will occur in 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	

Routing Analysis

On this page

Routing Analysis Section Main Window

Routing Analysis section represents a routes 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 *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):

Screenshot: DR Analysis search form

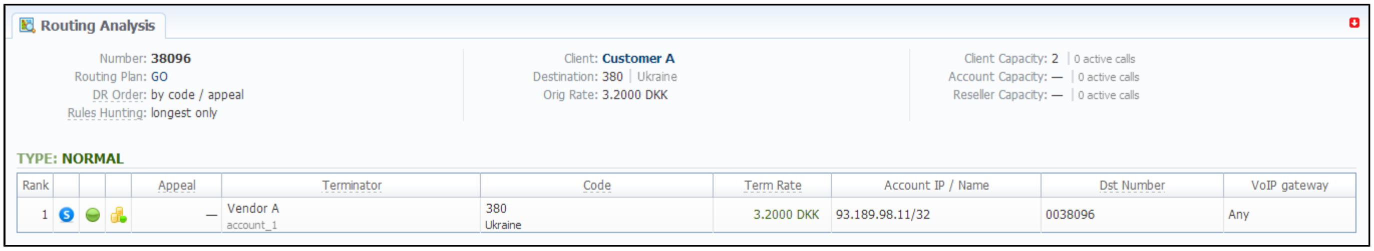
Field	Description
Number	Enter a phone number here to define a destination (you can use «*» as any symbol, for example, 380* means any number that begins with 380)
Client	Select a client you want to create report about
Rate Group	A group, which this rate belongs to. Refers to Jurisdictional Billing and 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, press «*Query*» button.

Forming DR Analysis Report

Here is how an analysis report may look like (Screenshot):

Screenshot: DR Analysis report



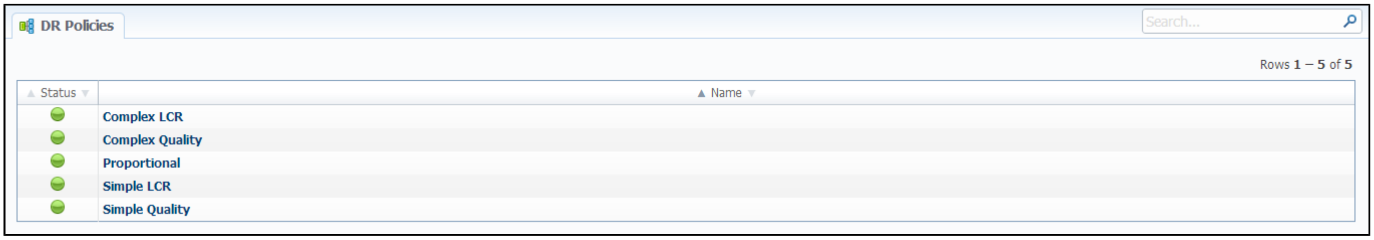
The resulting list shows detailed information regarding routing, including route availability / unavailability, profit margin control, reseller / group limitation, resulting appeal, code rate etc.

> **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.

Dynamic Routing Policies

This section simply lists currently available routing policies for VCS. They currently are (Screenshot):

Screenshot: DR Policies section main window



Policy	Description
Complex LCR	Three cheapest routes are sorted by quality
Complex Quality	Three routes with most quality are sorted by price
Proportional	The lower the price and higher the quality route has, the more priority it gets
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

JeraSoft VCS solution operates with it's own Routing Table, which is automatically created in defined regular periods of time to provide the «dynamic» part of the Routing. his Routing Table includes latest changes to whole routing process, that include all latest changes made to system configuration, such as clients or rates update, changes to routing plans, accounts reconfiguration etc.

It is always 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 routing table manually, please go to *System – Task Scheduler,* and click on the respective button. The routing table will be generated shortly after.

Routing Useful Tips

On this page

Routing by SRC Number / Orig Group

Dynamic Routing Module has the function of providing routing based on src numbers, in addition to usual dst number routing. To use this type of routing you can do the following:

- Go to *Configuration – Client Groups* and create a group of *Orig Traffic* type;
- Go to *Management – Clients* and open customer's presets tab, find *Traffic Processing* and perform a translation of Orig type, which says the following: in case call comes from specific src number (use *Src Match* field), put this call into group you just created (for routing by src number);

-or-

- Go to *Management – Clients,* open customer's accounts tab, and put an origination account into the group you just created (for routing by orig group);
- Go to customer's *Routing Plan* and specify in routing rule “Allow routing only for following groups”, where select orig group you've just created. This will insure that current rule will be applied only for traffic that belongs to specified group (either all traffic from designated src number(s) or from specified customer's account, belonging to an orig group).

If Routing Doesn't Work

If your newly routing setup doesn't work, please heed the following tips, maybe it's too early to call Customer Support Service:

- If you added or updated customer's rate, routing with new data will be available only after DynRouting Manager recreates routing table with most relevant information;
- If your customer's rate tables use Time Profiles, relevant rates will be effective in routing only after DynRouting Manager recreates the routing table after respective time profile settings come into effect (for example, if Time Profile states that rate is effective from 10am to 6pm, that rate will be used in routing only after first DynRouting Manager start after 10am, and not directly at 10am as stated by Time Profile);
- Pay attention to Routing Groups and Routing Permissions, it is possible that relevant vendors are forbidden for current customer or are in forbidden routing groups. This will be clearly visible in Routing Analysis, after query is made.

Routes Testing

JeraSoft VCS provides you means of comfortable and convenient testing of existing vendors. These means are provided by special routing plan, called *DR: Routes Testing*, which is not possible to edit through *Routing Plans* section. This plan will only be visible when assigned to a origination customer or in *Rout ing Analysis*.

So, how to use it? It's very easy. All you need to do is assign it to origination client which will be doing the testing (for example, this can be a SIP dialer phone of test-engineer), and then dial in following format: xxx*yyyyy, where xxx is an ID of termination vendor's account (these ID's can be viewed in *accou nts* pop-up, when you click “Extra Fields”) , and yyyyy – the actual number in international format (or other format, if it's set otherwise).

For example, if test-engineer will dial 100*4955667788, this will mean that number 4955667788 will be sent to a vendor, who has an account with ID = 100. This way a test person can quickly and conveniently test a lot of vendors, without the need to build new routing plans/rules for each particular case.

Jurisdictional Billing Module

From now you can get our Jurisdictional Billing Module, which supports jurisdictional routing with several features and solutions, including billing and routing over **NPA NXX codes** and support of **LNP** dipping from multiple vendors or over own database.

Jurisdictional Billing Module are integrated with TPM / LERG database and determines a jurisdiction of calls doing the following steps:

1. Parsing TPM / LERG database from inconnective to the internal format (jurisdictional_table);
2. After client identification process, identifying NPA-NXX for both Source and Destination numbers and finding out jurisdiction of the call through the internal jurisdictional table;
3. Setting call group to the one of the following:
    - Interstate – InterLATA;
    - Intrastate – InterLATA;

    - Interstate – IntraLATA;
    - Intrastate – IntraLATA.
4. Getting appropriate origination rate group.

> ⚠ Please note that Jurisdictional Billing (billing and routing over **NPA NXX codes**) is not included in *Dynamic Routing* for terminating vendors.

For more information about getting this Module please contact with JeraSoft Support Team.

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 Methods
- Time Profiles
- Taxes Profiles
- Groups
- Invoices Templates
- VoIP Gateways
- Settings

Code Decks

On this page

Code Decks Section Main Window

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:

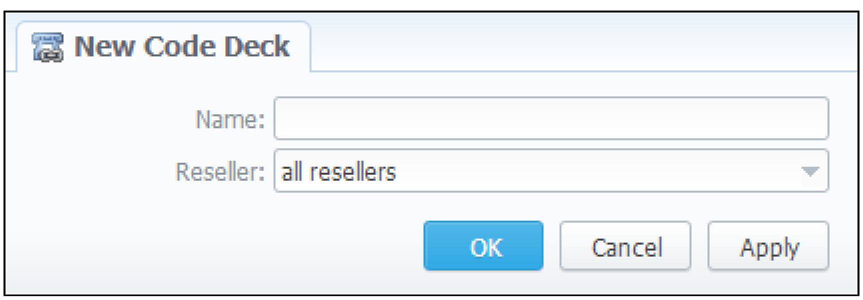
Screenshot: Code Decks section main window

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

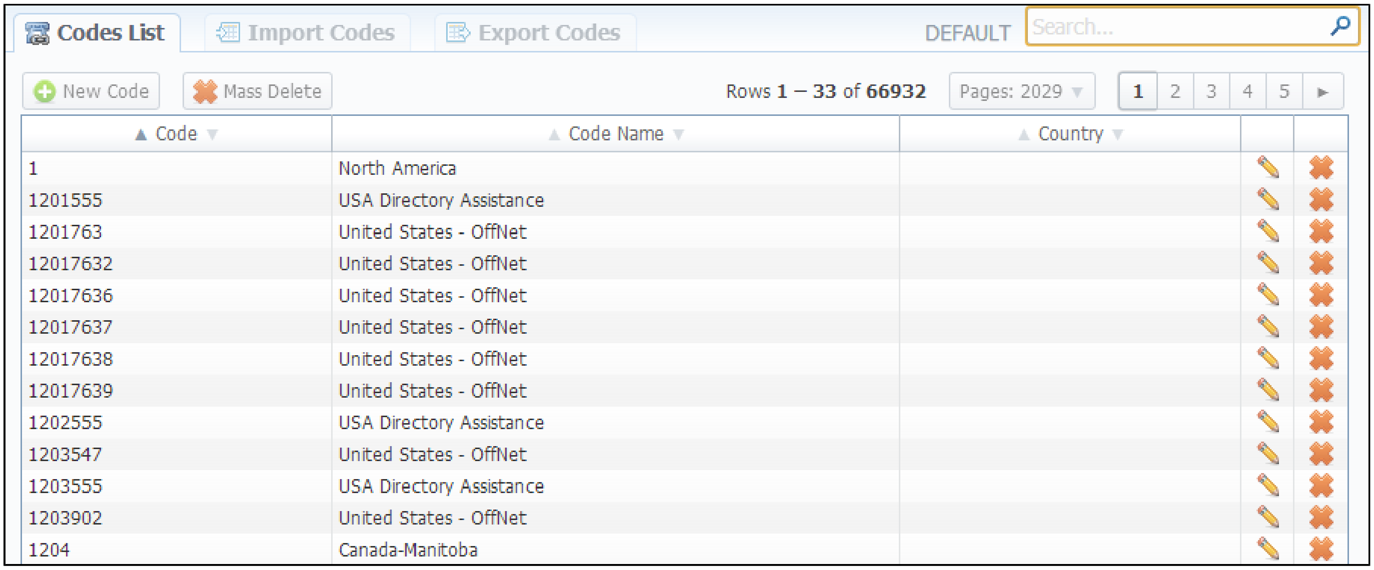


Managing Code Decks

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:

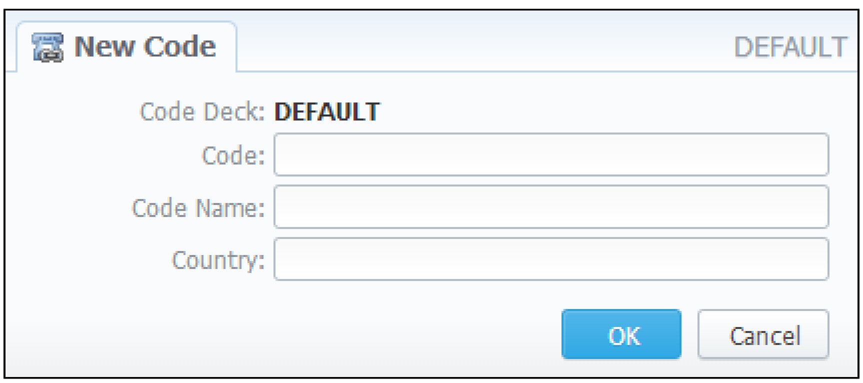
Screenshot: Code deck's contents



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

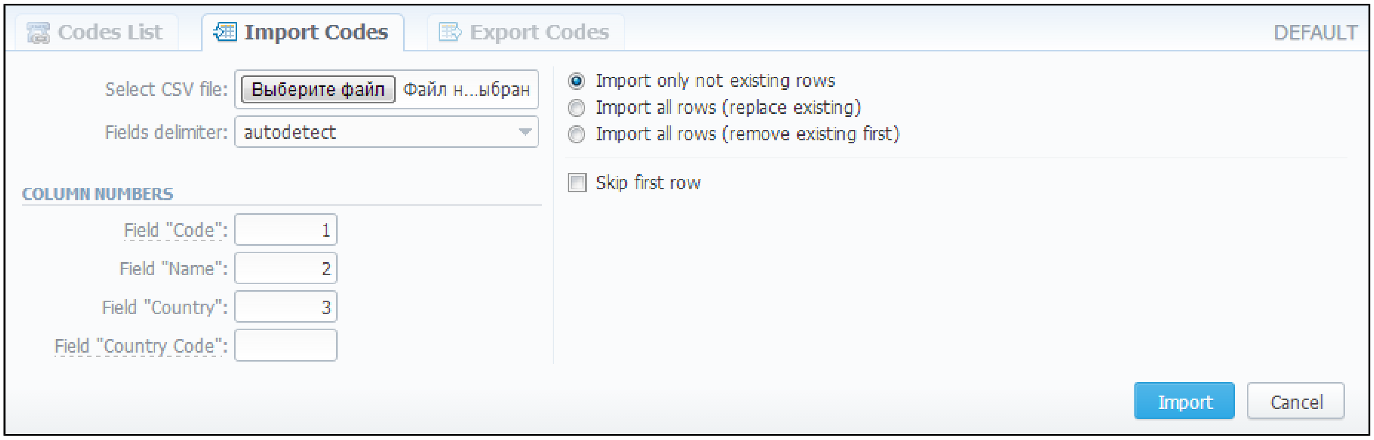


Field	Description
Code	Destination code
Code Name	Displayed name of a code group
Country	Which country the codes in current group will belong to

Importing Codes

It is the possibility to import a list of codes and code names from file. To import a file, do the following: go to the *"Import Codes"* tab (Screenshot down below) and fill the following fields:

Screenshot: "Import Codes" section tab



Field	Description
Select CSV file	Select an import CSV file
Fields delimeter	Specify here a delimiter symbol
Field "Code"	Specify column number that corresponds to number prefix that will be displayed in reports
Field "Name"	Specify column number that corresponds to number prefix that will be displayed in reports
Field "Country"	Specify column number that corresponds to number prefix that will be displayed in reports
Field "Country Code"	Specify column number that corresponds to number prefix that will be displayed in reports
"Skip first row" Checkbox	Enables file first row ignoring during import

And also, specify field importing method:

Method	Description
Import only not existing rows	Import only empty rows
Import all rows (replace existing)	Import all rows with overwriting of existing rows
Import all rows (remove existing first)	Import all rows with removal of existing rows

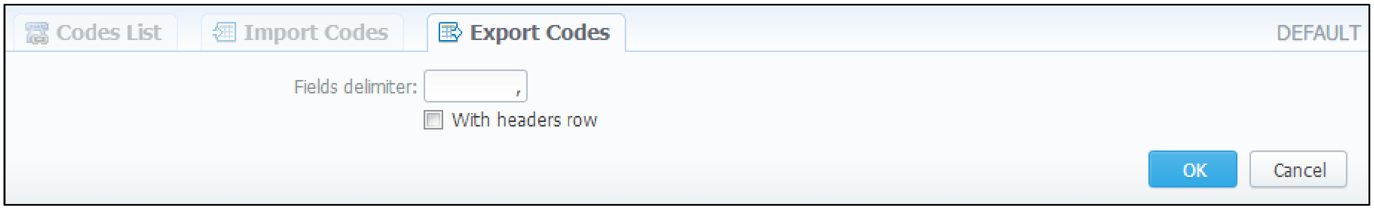
The import file may have this structure:

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 (o ptional). 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

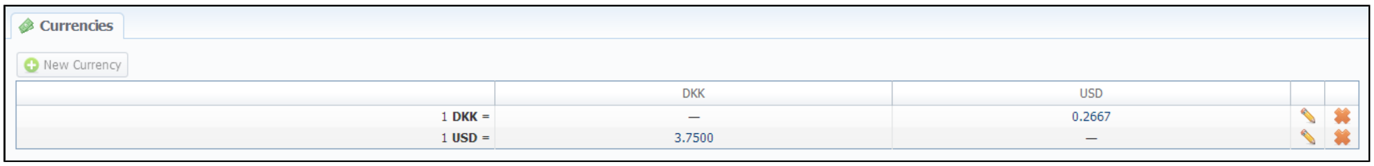
Currencies

On this page

Currencies Section Main Window

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

Screenshot: Currencies section main window

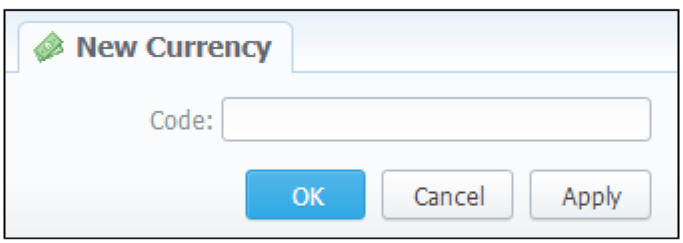


The list is displayed as currency exchange table, where each currency has direct exchange rate with any other currency.

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

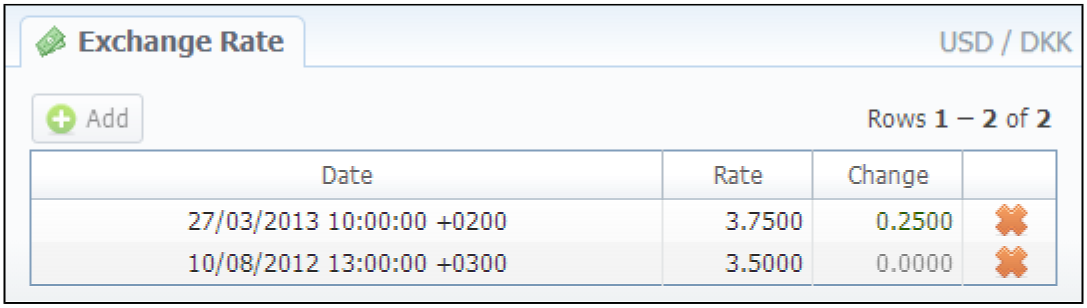


Specifying Currencies Rate

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

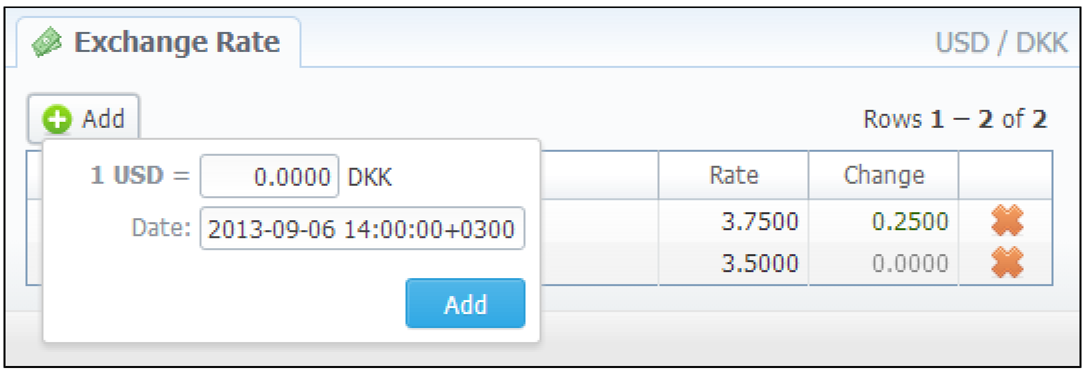
In pop-up window (Screenshot below) you can view a history of currency's rate changes that were made from currency's creation up to this moment.

Screenshot: Currency's rate changes history



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



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.

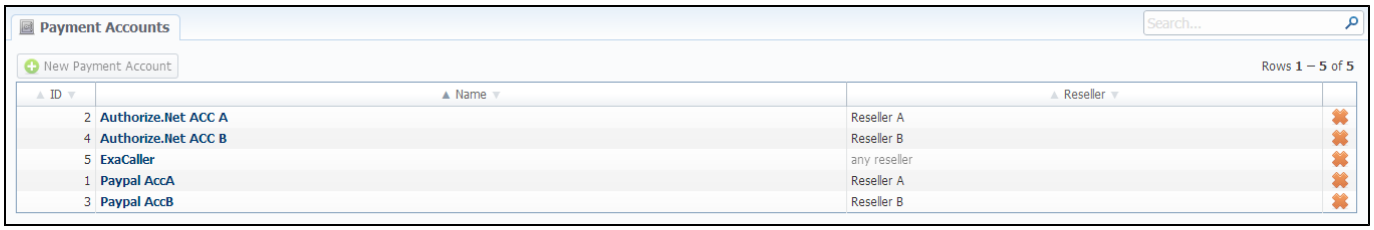
Payment Accounts

On this page

Payment Accounts Section Main Window

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.

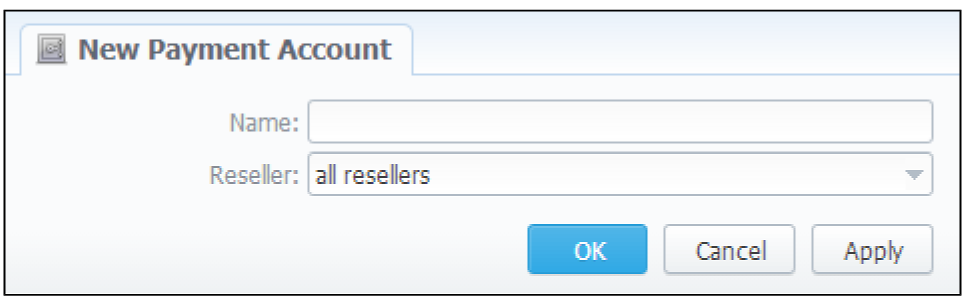
Screenshot: Payment Accounts section main window



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



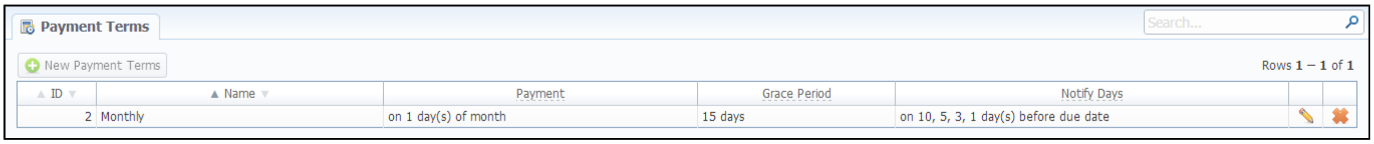
Payment Terms

On this page

Payment Terms Section Main Window

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

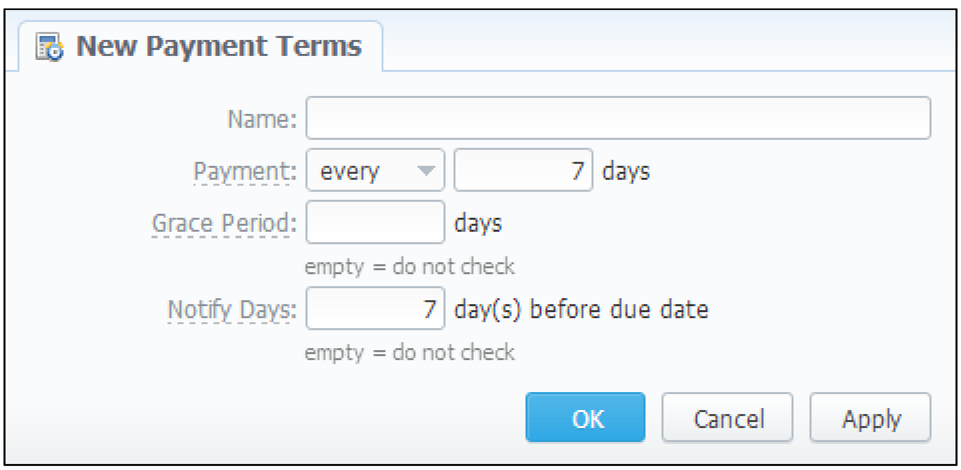


This list houses the profiles that determine payment terms. These profiles are used to autoinvoice your clients.

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



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

Payment Methods

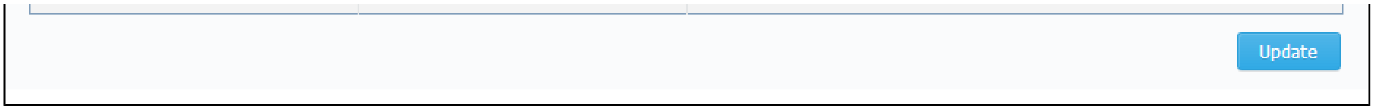
On this page

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 and Ukash* (Screenshot).

Screenshot: Payment Gateways section main window


PAYPAL
ORDER POSITION: 0
E-mail: paypal@exa.com.sa
You PayPal e-mail, payment recipient.
Gateway Currency: U.S. Dollar (USD)
Currency which will be used by user to perform a payment.
System Currency: USD
This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).
Amount Limits: 50, 100, 200, 500, 1000
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: Paypal AccA / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
AUTHORIZE.NET
ORDER POSITION: 0
Login: admin
Add your API login ID
Transaction Key: ••••••••
Add your API transaction key
Amount Limits:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
MONEYBOOKERS
ORDER POSITION: 0
E-mail:
Your Moneybookers e-mail, payment recipient
Secret word:
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: DKK
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:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
TOP-UP CARDS
ORDER POSITION: 0
Payment Account: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.
UKASH
ORDER POSITION: 0
Security Request Token:
20-Character alphanumeric unique Request-Token provided by Ukash. The token is used to validate the merchant account.
Security Response Token:
20-Character alphanumeric unique Response-Token provided by Ukash. The token is used to validate the merchant account.
Brand Id:
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: DKK
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:
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: Authorize.Net ACC A / Reseller A
Specify account which will be used for transactions from this payment gateway.
Description: Here you can add funds to your balance by using your PayPal account.
A user will see this text as a help-tip for respective payment method.



Configuring Payment Gateways

To configure 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 *Gateway Currency*
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

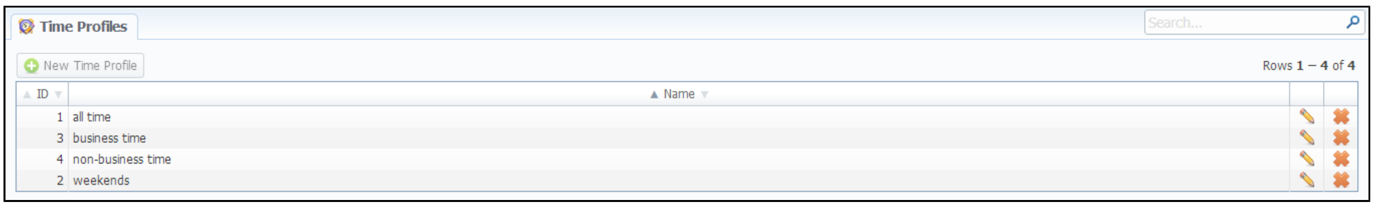
Time Profiles

On this page

Time Profiles Section Main Window

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:

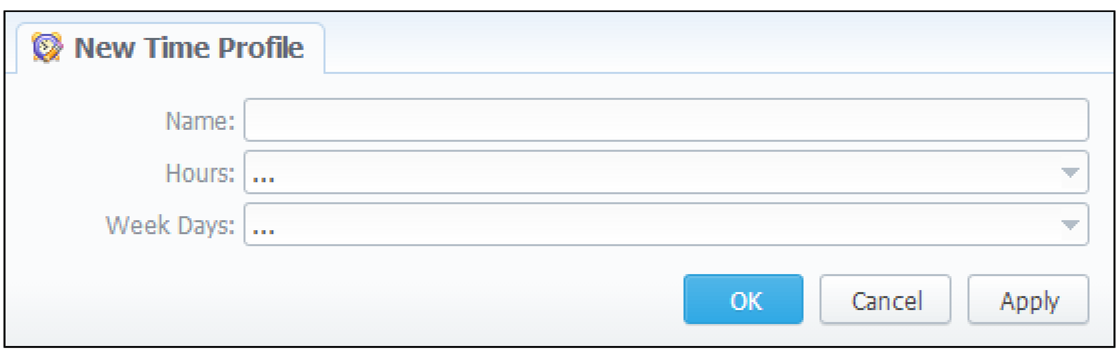
Screenshot: Time Profiles section main window



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



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 Section Main Window

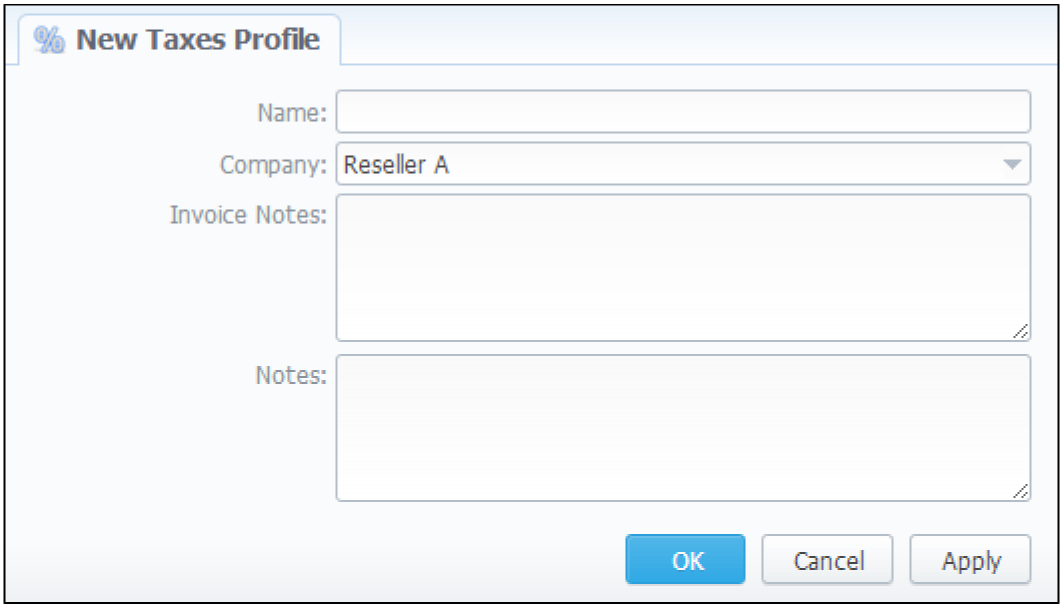
This section allows you to create so-called tax profiles, a set of taxation rules that can be applied to your rate tables in different taxation schemes.

Screenshot: Taxes Profiles section main window

Creating New Taxes Profile

To create new profile click *“New Taxes Profile”* button and in pop-up window fill name and reseller-owner of current profile (Screenshot below). Also, you can fill in *notes* and *invoice notes* fields (invoice notes are additional text that will be a description of this tax profile in invoice).

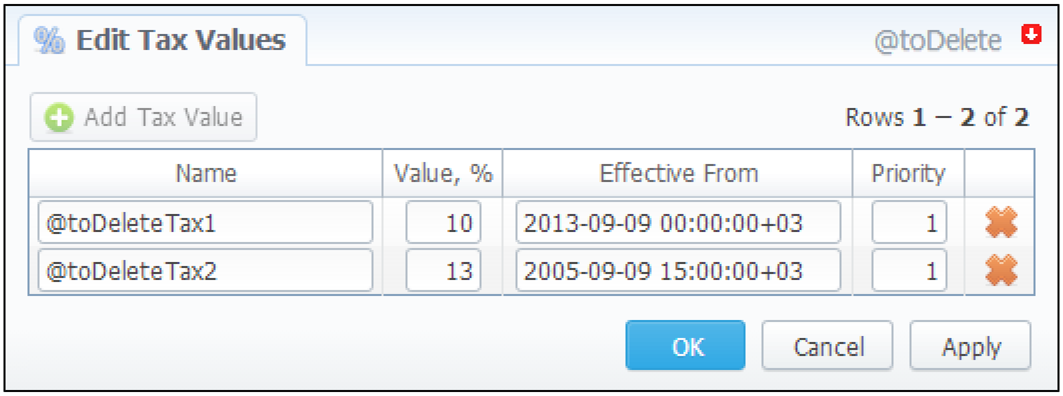
Screenshot: "New Taxes Profile" window



Adding Taxation Rules

To actually add a taxation rules, you need to click icon. In the pop-up window you can add new rule by clicking on *"Add Tax Value"* button or edit already existed tax rule line, where you need to specify current tax name, it's percent value, effective start date and priority (Screenshot).

Screenshot: "Edit Tax Values" window



Tip: Priority is a way to build more complex tax schemes than simple “add % of tax to operation sum”. Priority works in following way: each following priority will add tax % to operation sum plus all previous priorities values. For example, if operation sum is 100USD, and there is single tax with priority 1 and value of 10%, the taxation result will be 10USD, so full operation plus tax is 110USD. If there are two taxes with priorities of 1 and 2, and respective values of 10% and 20%, then first tax yield will be 10USD, and second tax yield will be 22USD (because 20% is calculated from sum of operation plus previous tax), and total will be 100 + 10 + 22 = 132USD.

Groups

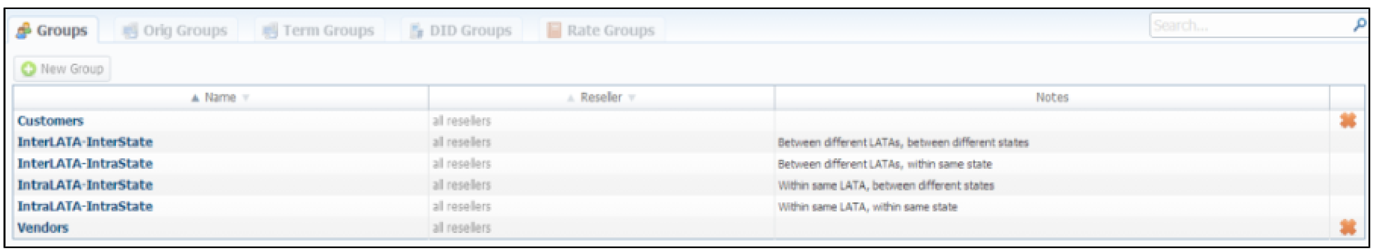
On this page

In this section all groups, which are represented in the system (of clients, accounts, etc.), are managed. All groups are represented in the form of tabs, for selecting a needed group simply click on the tab with its name.

Client Groups Section Main Window

This section displays a list of client groups presented in the system.

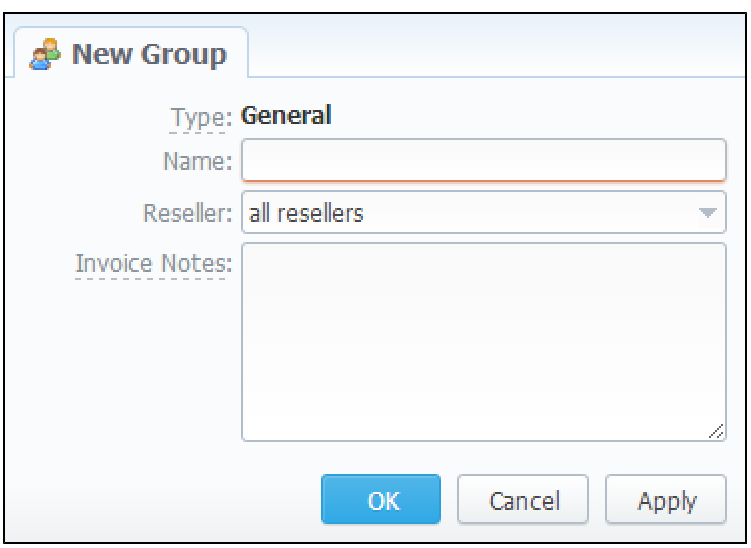
Screenshot: Client Groups section main window



Adding New Client Group

To create a new client group press the “New Group” button. Then enter a name for this group and fill other fields, if you need them.

Screenshot: Client Group "New Group" window

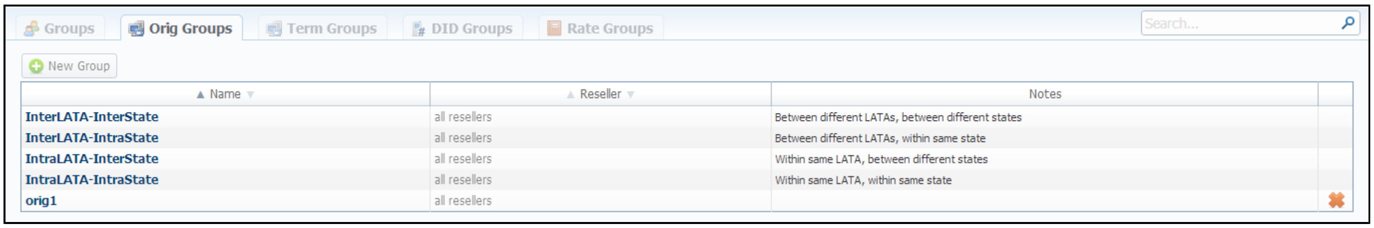


Field	Description
Name	A group name
Reseller	Specify a reseller for this group
Invoice Notes	Additional text which will be added to all invoices, issued to clients of current group

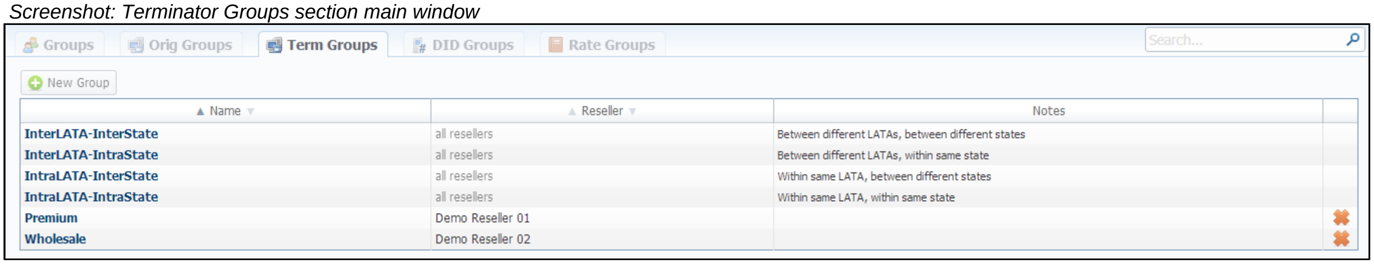
Account Groups Section Main Window

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



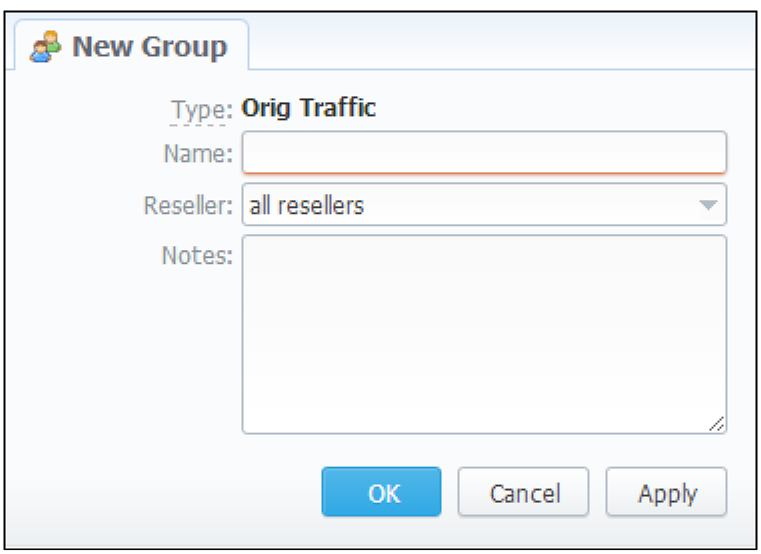
Screenshot: Terminator Groups section main window



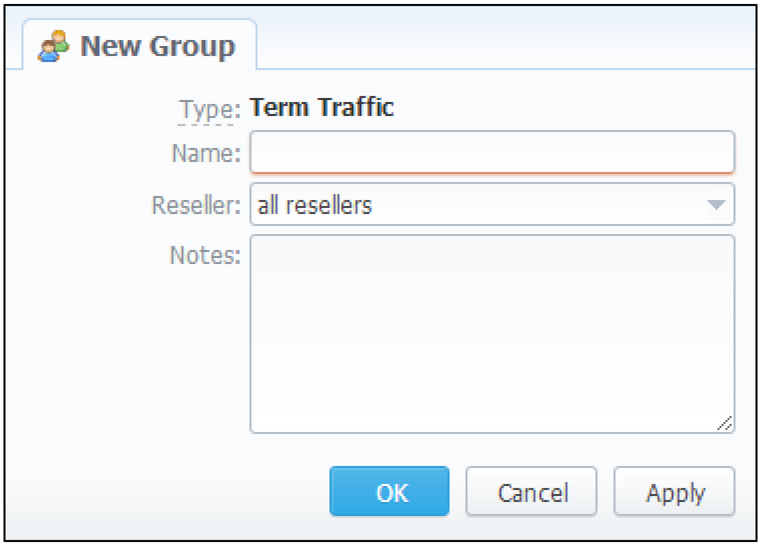
Adding New Account Group

You can add new originator group by pressing the “New Group” button (Screenshots below). Then fill all needed fields in the pop-up window.

Screenshot: Originator Group "New Group" window



Screenshot: Terminator Group "New Group" window



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

DID Groups Section Main Window

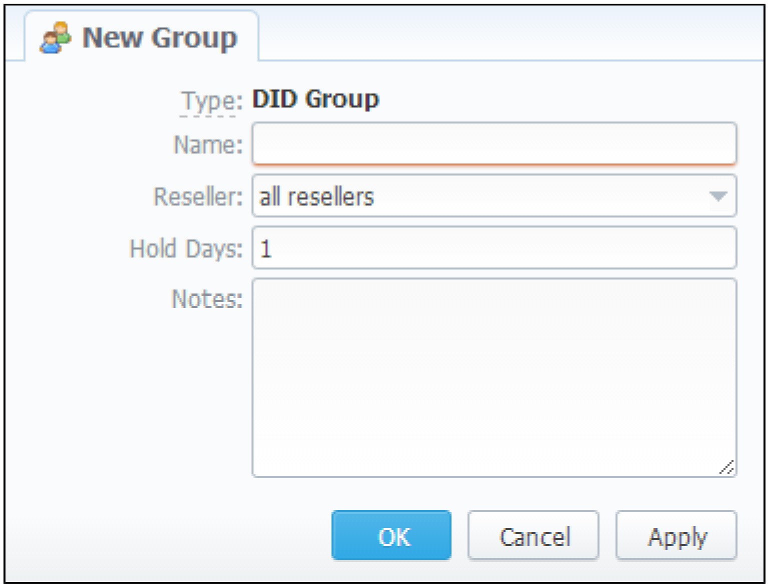
This section displays a list of created DID groups for using them in Retail Module:

Screenshot: DID Groups section main window

Adding New DID Group

For adding a new DID group you should press the “New Group” button. Then fill all required fields in the “New Group” window.

Screenshot: DID Group "New Group" window

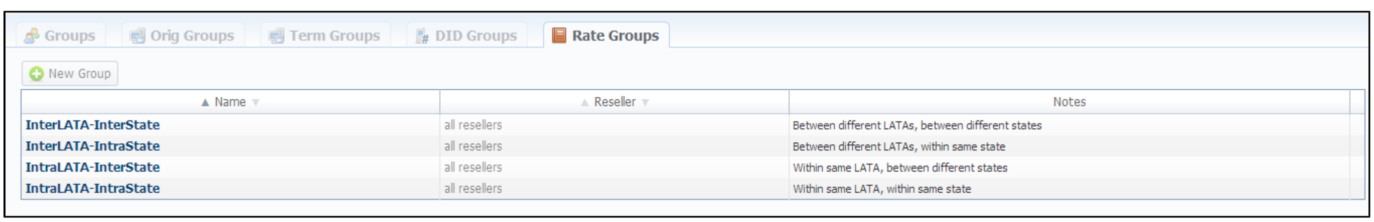


Field	Description
Name	A group name
Reseller	Specify a reseller for a group
Hold Days	Specify the number of days till the deactivation of DID assigned package
Notes	Additional information about a group

Rate Groups Section Main Window

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

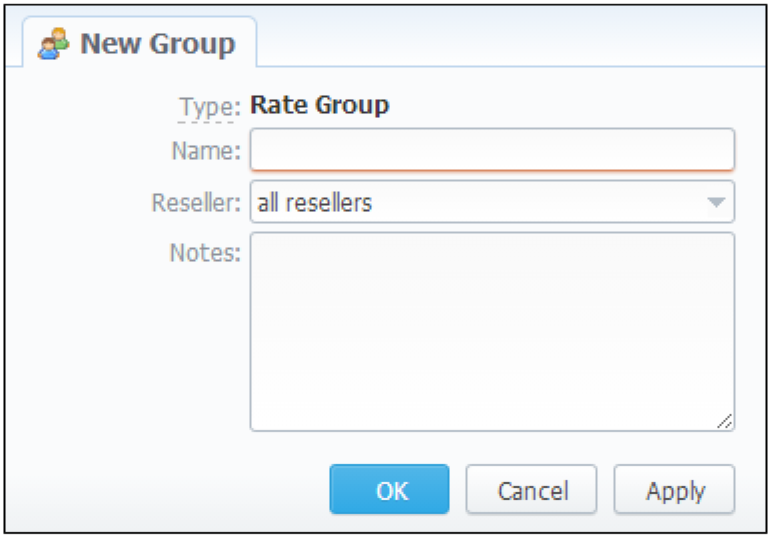
Screenshot: Rate Groups section main window



Adding New Rate Group

You can add new Rate group by pressing the “New Group” button. Then fill all needed fields in the pop-up window.

Screenshot: Rate Group "New Group" window



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

Invoices Templates

Invoices Templates Section Main Window

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.

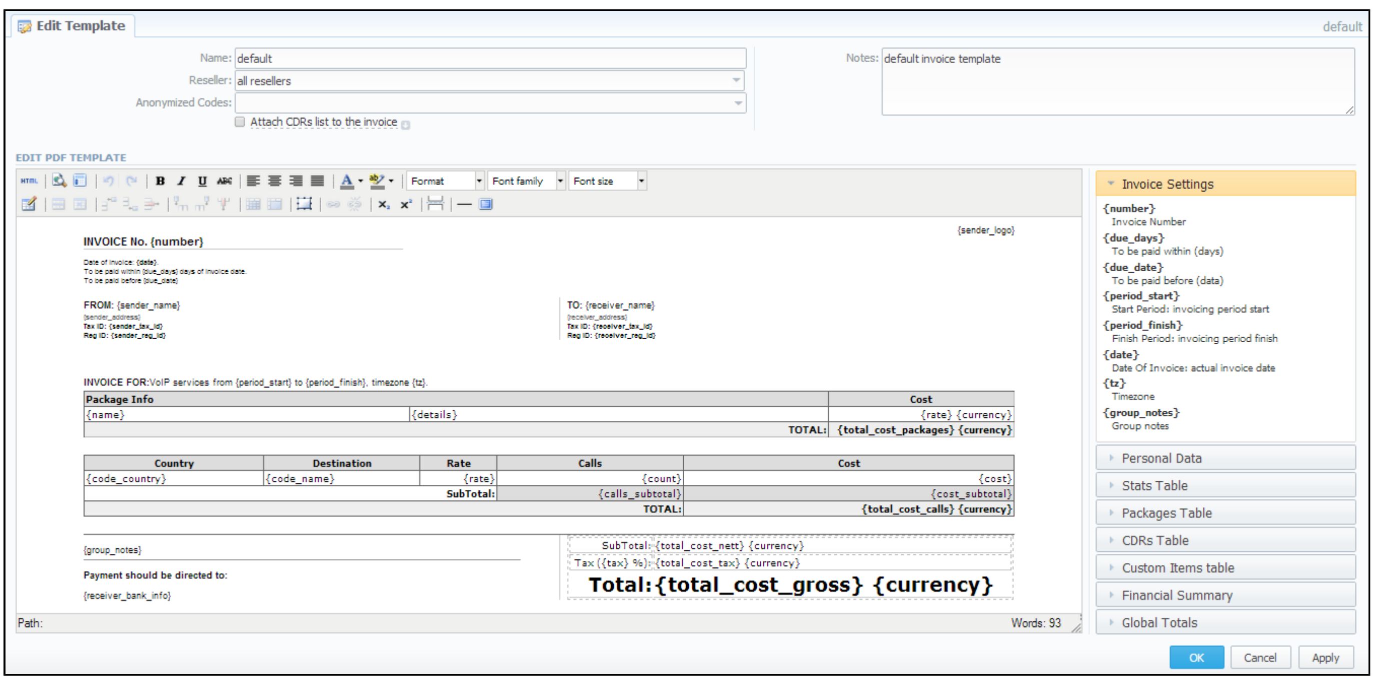
To use this feature you need to access *Configuration – Invoices Templates* section and proceed with browsing default templates or creating a new one (Screenshot).

Screenshot: Invoices Templates section main window

Creating New Invoice Template

When creating new template, first thing you must choose is the type of 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. If *pdf* template is selected, you will see the interface similar to one of the popular text processors (Screenshot).

Screenshot: Creating an invoice template



The whole process is following:

- Add a table to your workspace, right-click on it and define table class (stats, cdrs, packages, 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.

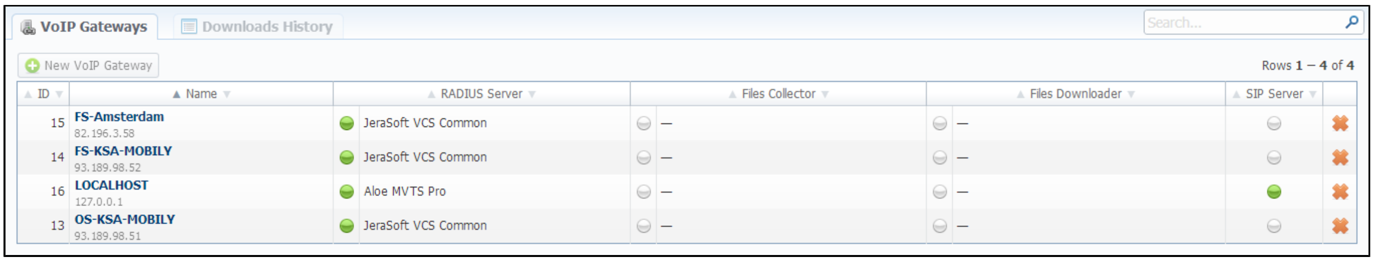
VoIP Gateways

On this page

VoIP Gateways Section Main Window

This section allows you to configure and integrate all switches into billing via RADIUS or CDR-files upload. Main window of this section is displayed on Screenshot:

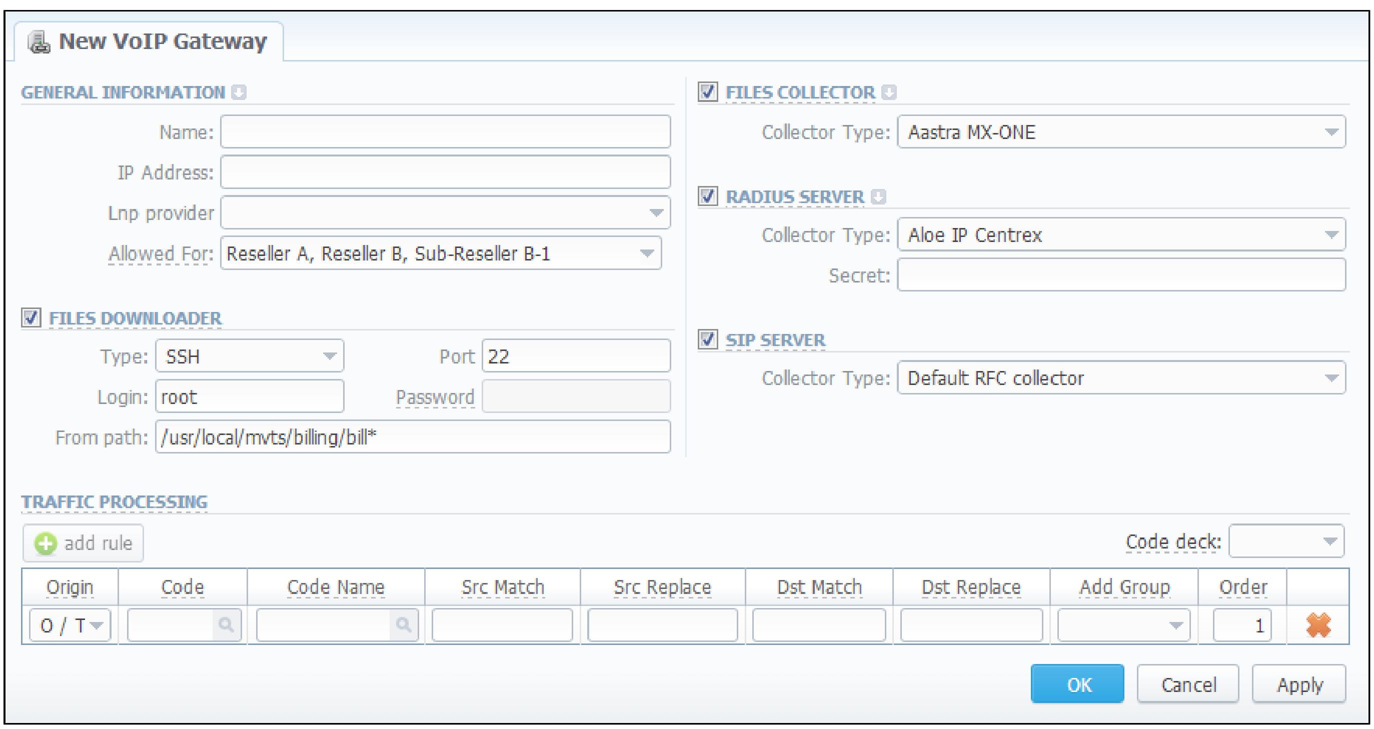
Screenshot: VoIP Gateways section main window



Adding New VoIP Gateway

To add a new switch press *"New VoIP Gateway"* button and specify next parameters in a window that opens (Screenshot). Take a note, that some fields open by clicking on icon near respective section.

Screenshot: Adding new VoIP Gateway



Section	Fields And Descriptions	
General Information	General gateway and calls processing information	
	• ***Name***	VoIP gateway name
	• ***IP Address***	VoIP gateway IP-address
	• ***LNP Provider***	Specify here a LNP provider
	• ***Allowed For***	Specify here, which resellers can use current VoIP gateway
	• ***Ident Priority***	Set the priority of account identification
	• ***ORIG ANI Ident***	Sets originating calls ANI identification (options available: SRC number ext, SRC number bill, DST ext, DST number bill)
	• ***TERM ANI Ident***	Sets terminating calls ANI identification (options available: SRC numberext, SRC number bill, DST ext, DST number bill)
	• ***"Rate ORIG calls by DstIn number" Checkbox***	Activates / deactivates originating calls processing by full phone number in statistics
	• ***"Rate TERM calls by DstOut number" Checkbox***	Activates / deactivates terminating calls processing by full phone number in statistics
	• ***"Rate calls only with “success” status" Checkbox***	Activates/deactivates processing of calls that have “success” end code only
Files Downloader	Downloader settings	
	• ***Type***	Specify port type (SSH or FTP)
	• ***Port***	Specify port for SSH or FTP
	• ***Login***	Gateway server login (default value is *“root”*)
	• ***Password***	Password is required for FTP integration. For SSH you have to crate SSH-keys
	• ***From path***	Specify CDR-files path (mask paths are allowed)
Files Collector	*File Collectors* gather call data from CDR-files (activate this option if you plan to use integration via CDR-files)	
	• ***Collector Type***	Which collector type should be used

	• ***Overwrite TZ***	Timezone selection (if you select a different timezone, system will ignore a timezone information stored in CDRs-file and use current value)
	• ***"Skip Zero Calls" Checkbox***	Activates / deactivates zero duration calls ignoring
	• ***"Skip Released Calls" Checkbox***	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)	
	• ***Collector Type***	Which collector type should be used
	• ***Secret***	RADIUS-server password
	• ***Overwrite TZ***	Timezone selection (if you select a different timezone, system will ignore a timezone information stored in CDR file and use current value)
	• ***"Track Active Calls" Checkbox***	Enables the display of active calls in *Active Calls* section
	• ***"Skip Zero Calls" Checkbox***	Activates / deactivates zero duration calls ignoring
	• ***"Skip Released Calls" Checkbox***	Activates/deactivates released calls ignoring
SIP Server	Allows acceptance of SIP packets from current gateway. Required for SIP Redirect routing feature	
Traffic Processing	Here you can set number translation rules that will be executing for all calls processed by current gateway	

Files Downloading History

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

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:
TST
Select which currency is the default one, it will be used for generation of routing tables and matching of profitability margin.
Domain name:
https://172.20.9.13/
Domain name field (It should always start with "https://" and should not be empty!)
Default language:
English
Choose which language will be selected by default on login screen
Timezone:
Europe/Kiev
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
Enable clients panel
Enables client's access to control panel with rates and statistics at /clients/
Enable CAPTCHA for clients
Enables graphical defence during sign-in to client's control panel
Enable CAPTCHA for administrators
Enables graphical defence during sign-in to administrator's interface
Default PIN Length:
12
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.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
OUTPUT AND IMPORT/EXPORT
Date Format:
%d/%m/%Y
Output format for dates, you can check syntax for this field in the User Manual
Datetime Format:
%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:
33
Default number of items per page in system interfaces.
CSV Delimiter:
,
Default delimiter used for CSV files when importing/exporting
CSV Decimal Point:
,
What will be used as decimal separation point for numbers ("," - for most cases)
Close rates marked by:
delete, block, close
When importing rate table, if some rates have notes that they are closed, system will close the appropriate destinations after importing them. This field defines what marking words should be taken as ones closing a rate. System also search for longer words, for example: close - closed, delete - deleted, etc.
Number formatting:
0
Count of destination call number digits which should be hidden
Output Encoding:
UTF-8
Encoding, that will be used during exporting data to file.
INVOICING SETTINGS
Invoice No Template:
%Y%m/%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:
100347
Last Invoice No used in system for generation of invoices
Default invoice fields:
Country, Destination, Rate, Minutes, Cost
List of fields that will be selected by default during invoices generation. Same fields will be used during auto-invoicing generation.
Autoinvoicing Delay:
5
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.
CDR fields for invoices:
Call Date, Code Name, Code, Dst Number, Billed Time, Rate, 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.
RADIUS SERVER
Bind to address:
empty - bind to all
Specify your server IP addresses (separated by comma) to bind to, empty field means bind to all addresses.
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 thread that process packets, usually should equal to number of CPU cores - 1
Max call length:
3600
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:	5060	Listen for auth packets on specified port.

DYNAMIC ROUTING

Analyze Period:	300 minute(s)	What amount of last minutes of statistics will be analyzed to build a routing table.
	☐ Log empty routes	Enable to get messages to Events Log about zero-routes (degrades performance)

NOTIFICATION AND MONITORING

	☑ Event on not found account	Send event to events log, when client/account was not identified during processing of CDRs or RADIUS Authorization
	☑ Event on not found tariff	Send event to events log, when destination/rate was not identified during processing of CDRs or RADIUS Authorization
	☐ Event on zero time calls	Send events even if call has zero length
Resend low-balance events every:	24 hour(s)	How often to resend e-mail regarding low customer's balance
Rate changes notification period:	5 hour(s)	Customer will be informed regarding rates changes in given amount of hours after the actual change.
Period to notify future changes:	7 day(s)	Customer will be informed about rates for next X days.
Watch for free space at:	/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:	5	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:	1 day(s) (from 1 to 90)	Delete events from Events Log after specified period of days.
Statistics rotate delay:	100 day(s) (0 - do not rotate)	Rotate statistics to archive after specified number of days.
Delete not actual rates after:	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:	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:	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:	89 day(s) (from 1 to 90)	Delete DIDs history from DIDs history after specified period of days.

BACKUP SETTINGS

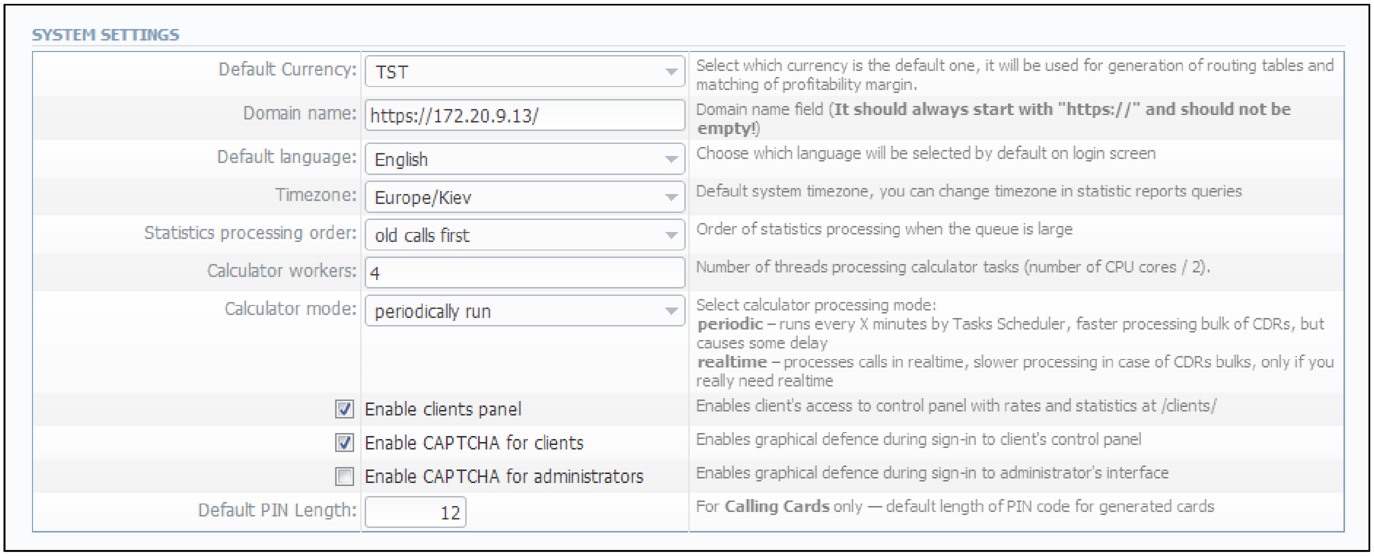
System backup period:	0 hour(s) (0 - do not backup)	How often to backup system, please note that actual backup will be done at the time when Backup Manager process runs.
Destination for backup packages:		Absolute path where to put backup packages, it can not be inside root of VCS system.
Leave last X packages:	10	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

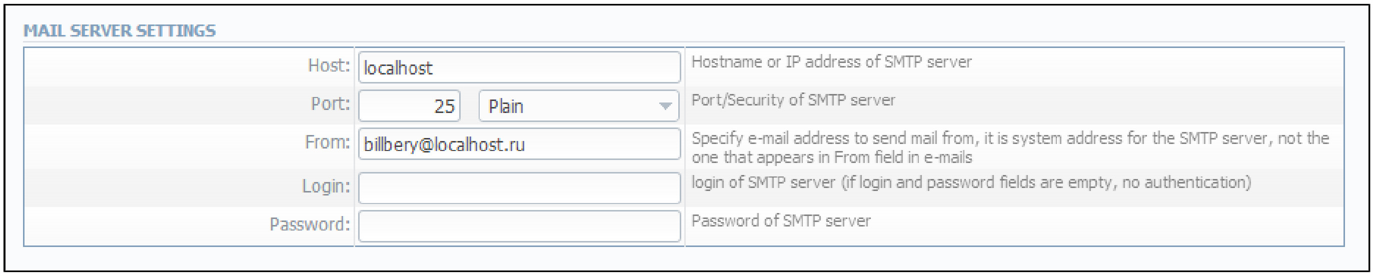


Field	Description
Default Currency	Specify currency that will be used as default for generation of routing
Domain Name	Enter relevant domain address of your VCS server. In most cases, VCS IP address should be entered here. Please note, if this name is specified incorrectly, you may experience issues 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)
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
"Enable CAPTCHA for clients" Checkbox	Enables CAPTCHA feature for customer interface
"Enable CAPTCHA for administrators" Checkbox	Enables CAPTCHA feature for administrator interface
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

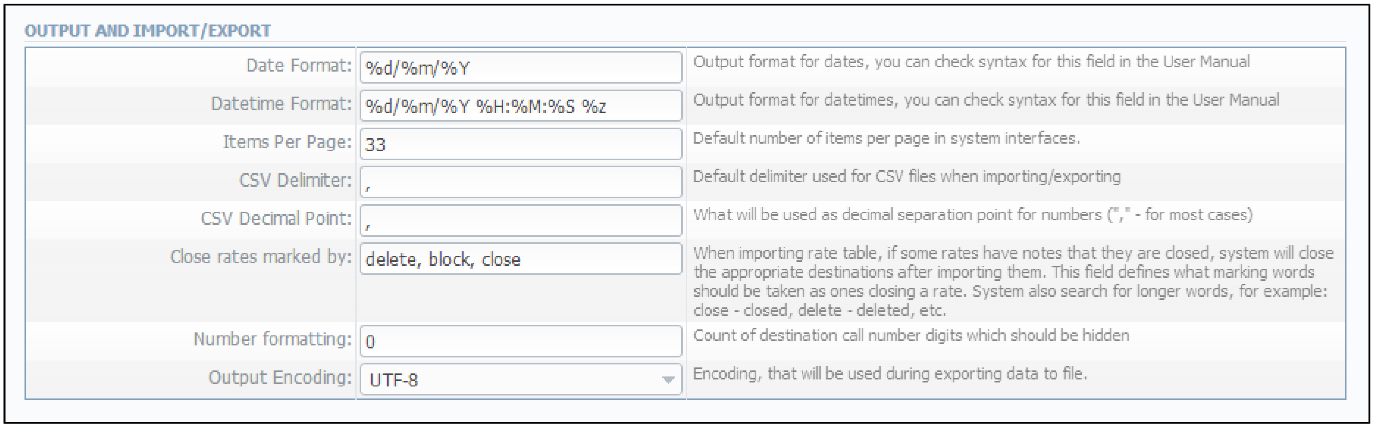


Field	Description
Host	Mail server address that is used by system
Port	Specify port and security type of SMTP server (Plain, TLS, SSL)
From	The e-mail address that will be specified as sender
Login	Login for SMTP server
Password	Password for SMTP server

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



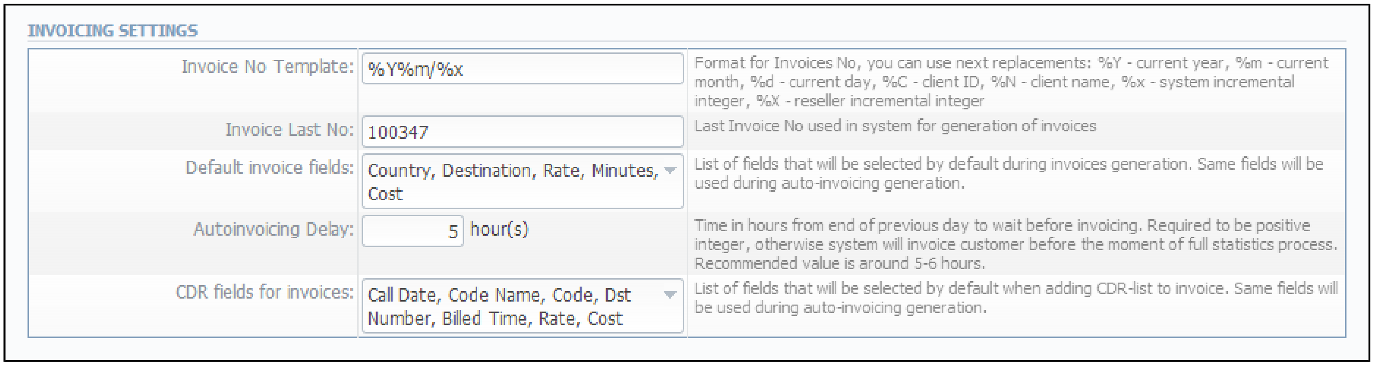
Field	Description	
Date Format	Specify date parameters here	
	• ***%d***	Day of the month in numeric form. Allowed values: from *01* to *31*
	• ***%m***	Month number. Allowed values: from *01* to *12*
	• ***%Y***	Number of the year, that consists of 4 numbers. Value example: *1999, 2005, 2010*
Datetime Format	Specify datetime parameters here	
	• ***%d***	Day of the month in numeric form. Allowed values: from *01* to *31*
	• ***%m***	Month number. Allowed values: from *01* to *12*
	• ***%Y***	Number of the year, that consists of 4 numbers. Value example: *1999, 2005, 2010*
	• ***%H***	Hours in 24-hour format with leading zeroes. Allowed values: from *00* to *23*
	• ***%M***	Minutes with leading zeroes. Allowed values: from *00* to *59*
	• ***%S***	Seconds with leading zeroes. Allowed values: from *00* to *59*
	• ***%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 *Rate Changes* column has one of the key-words entered here
Number formatting	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

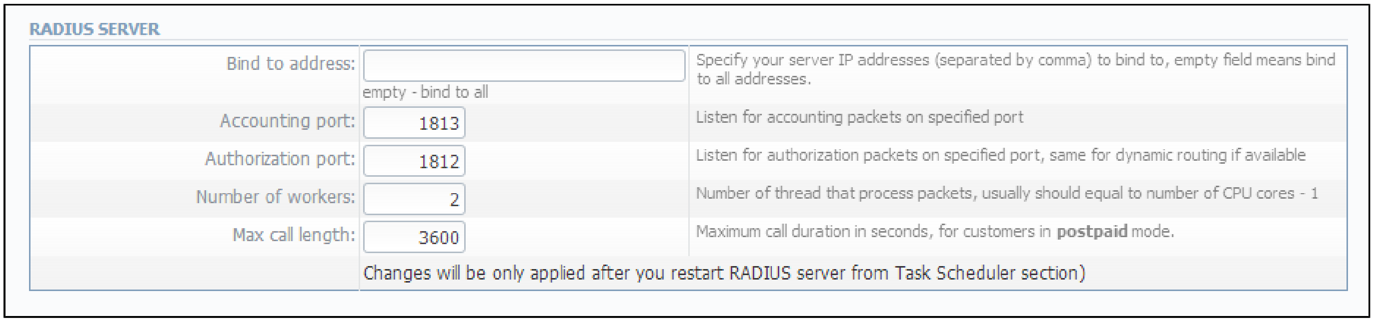


Field	Description
Invoice No Template	Default template for invoice number
Invoice Last No	Number of last issued invoice
Default invoice fields	You can select the displayable fields in automatically generated invoices here. This is used by autoinvoicing feature – if you don't use the autoinvoicing, you may ignore this setting
Autoinvoicing Delay	Time in hours system will wait until doing invoicing
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



Field	Description
Bind to address	Specify your servers 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, usually is equal to number of CPU cores minus one
Max call length	Limit maximum call length in seconds

SIP Server

SIP Server settings can be changed here (Screenshot):

Screenshot: SIP Server settings window

Fields	Description
SIP Port	Specify a SIP port that system should listen to

Dynamic Routing

Dynamic routing settings can be altered here (Screenshot):

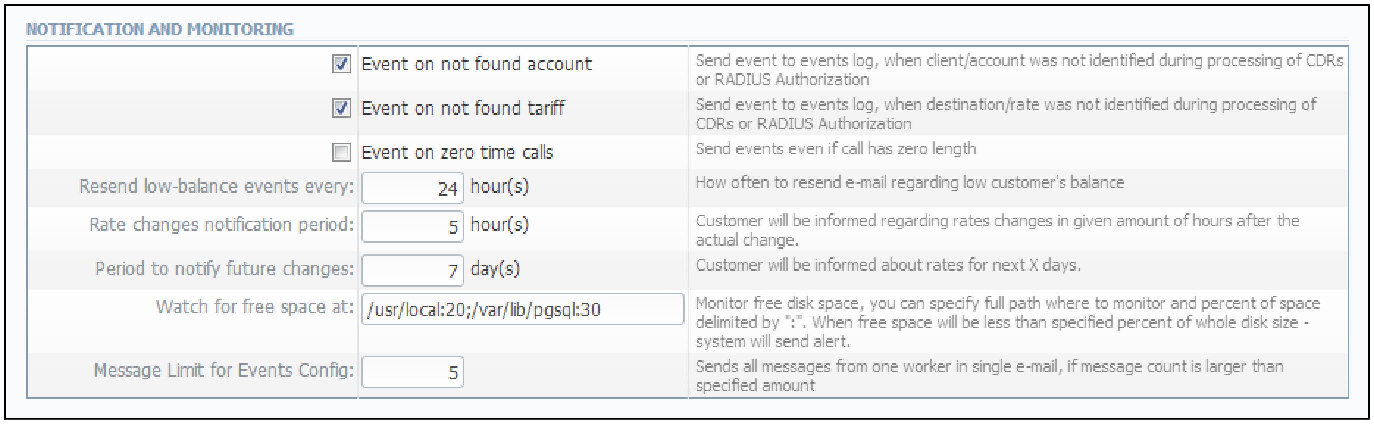
Screenshot: Dynamic Routing settings window

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

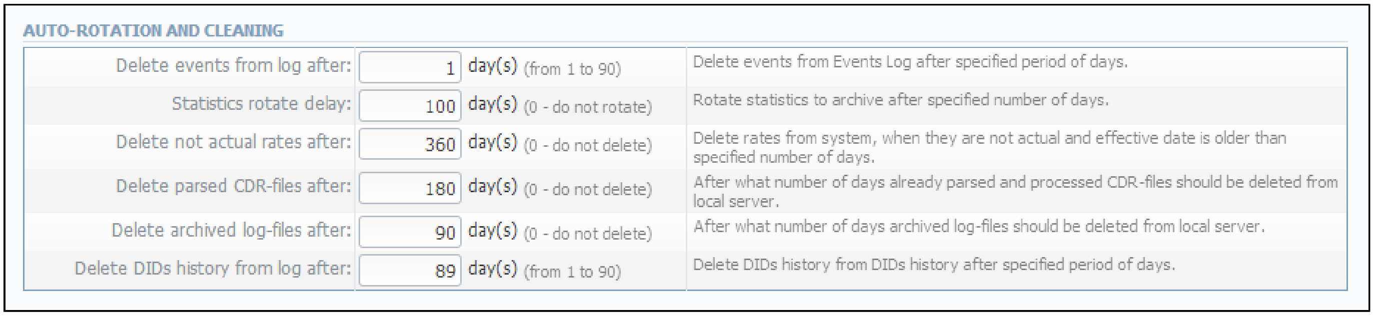


Field	Description
"Event on not found account" Checkbox	Activates/deactivates notify sending when no account was found
"Event on not found tariff" Checkbox	Activates/deactivates notify sending when no rate was found
"Event on zero time calls" Checkbox	Activates/deactivates all previous checkboxes effects 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

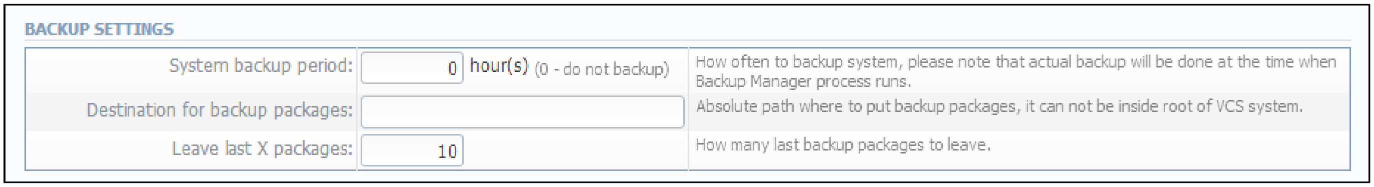


Field	Description
Delete events from log after	Here you can specify the number of days in which events will be removed from the log-files (when 0 is the value – events won't be deleted)
Statistics rotate delay	Satistics packages rotation delay (for example, if you will enter *"3"* as a value here, all 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



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 **Warning!** This folder must not be within any system folders!
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
- Mail Queue
- System Status
- Task Scheduler
- Users
- Roles

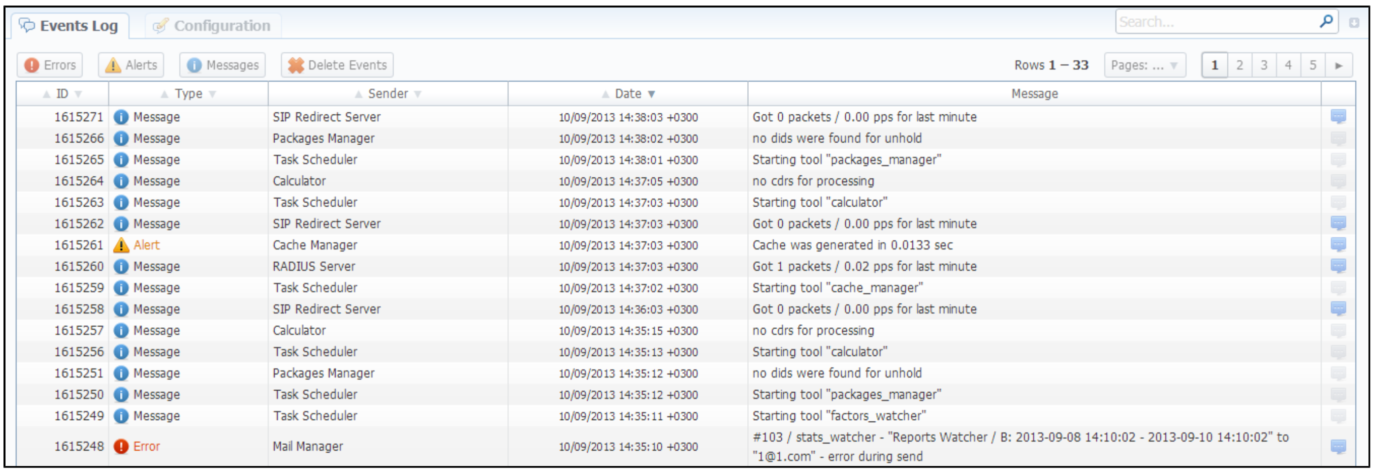
Events Log

On this page

Events Log Section Main Window

This section displays the list of all events recorded by the system (Screenshot):

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:

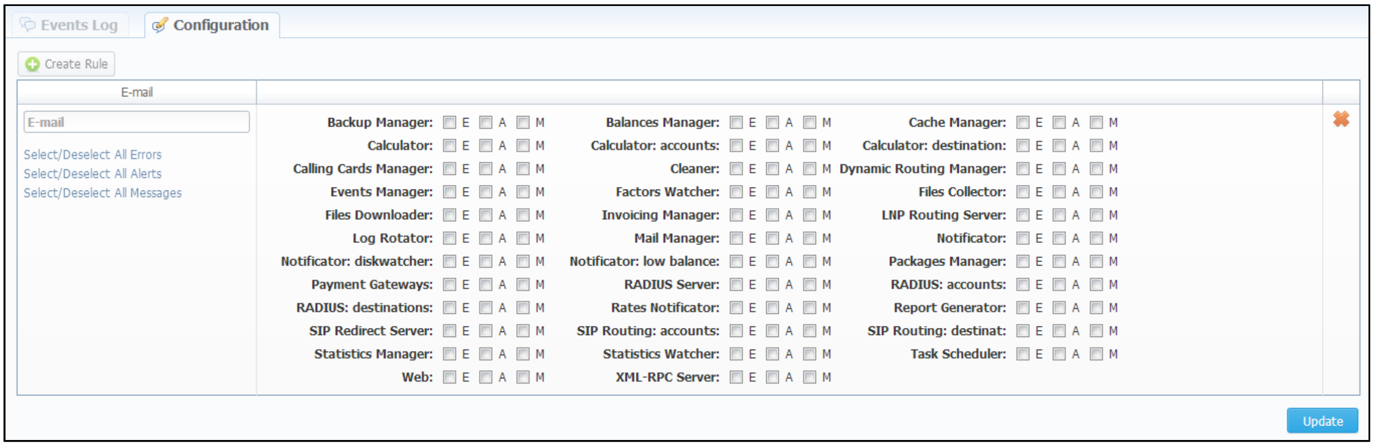
- incoming or outgoing call client is not registered within the system;
- phone number prefix is not registered within system;
- incoming call price is more than outgoing call price;
- incoming or outgoing call was rejected;
- etc.

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

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

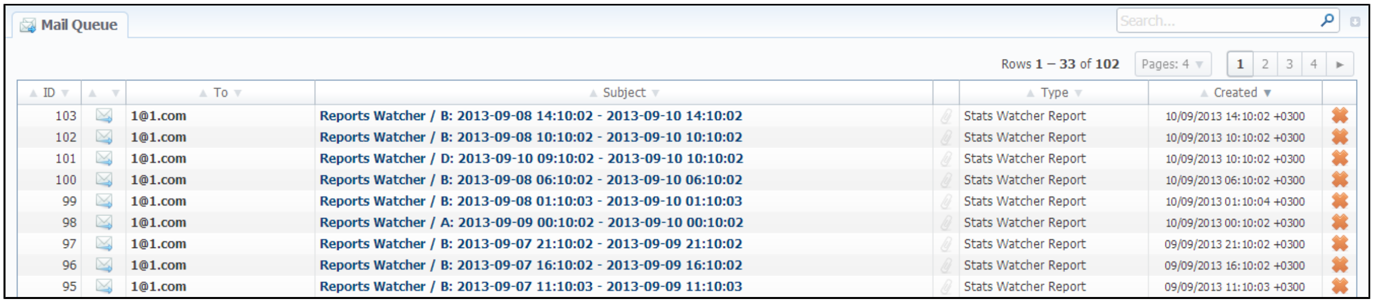


You may choose group and type of event, and specify an e-mail address to which notifications of the chosen type will be sent. You can add new set of empty fields by pressing *“Create Rule”* button. You can confirm current configuration of events by pressing *“Update”* button.

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

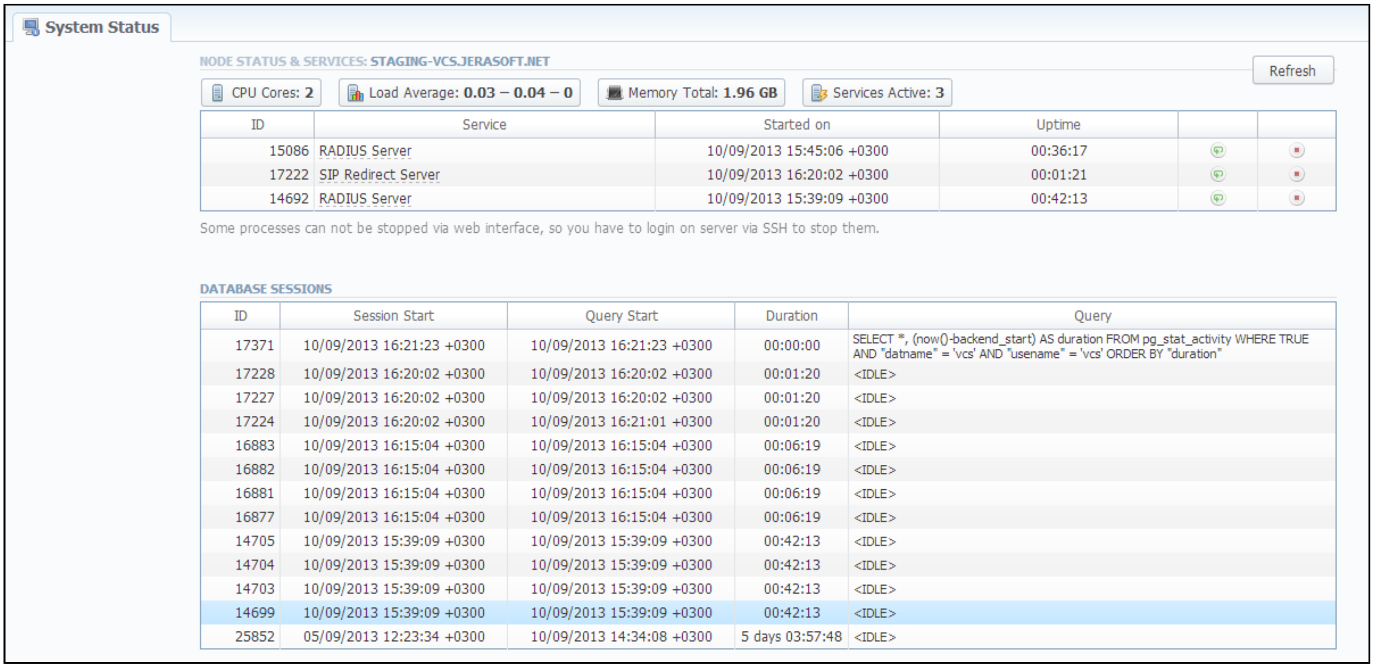


These can be invoices, low balance notifications or other types of messages system sends in form of e-mails.

System Status

This section displays all currently launched system services, system load info and current system database sessions (Screenshot):

Screenshot: System Status section main window



Node Status & Services 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.

Database Sessions table columns description is following:

Column	Description
ID	Database session ID
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.

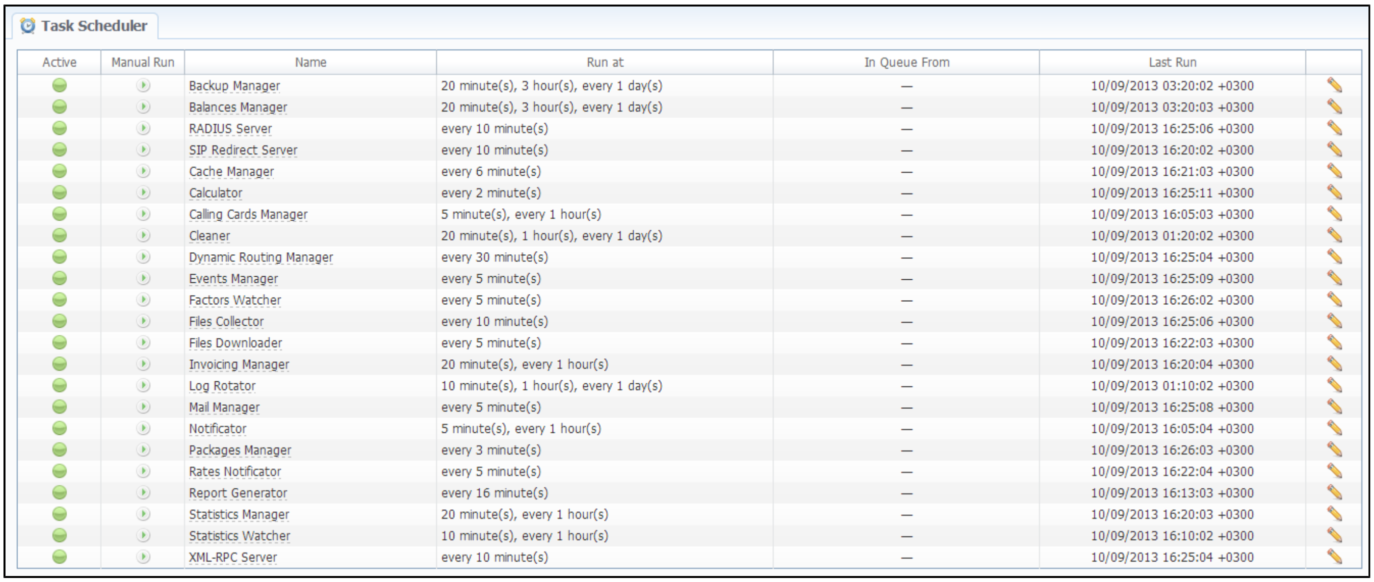
Task Scheduler

On this page

Task Scheduler

This section represents a task scheduler to manage system utilities (Screenshot):

Screenshot: Task Scheduler section main window


Task Scheduler

Active	Manual Run	Name	Run at	In Queue From	Last Run	
		Backup Manager	20 minute(s), 3 hour(s), every 1 day(s)	—	10/09/2013 03:20:02 +0300	
		Balances Manager	20 minute(s), 3 hour(s), every 1 day(s)	—	10/09/2013 03:20:03 +0300	
		RADIUS Server	every 10 minute(s)	—	10/09/2013 16:25:06 +0300	
		SIP Redirect Server	every 10 minute(s)	—	10/09/2013 16:20:02 +0300	
		Cache Manager	every 6 minute(s)	—	10/09/2013 16:21:03 +0300	
		Calculator	every 2 minute(s)	—	10/09/2013 16:25:11 +0300	
		Calling Cards Manager	5 minute(s), every 1 hour(s)	—	10/09/2013 16:05:03 +0300	
		Cleaner	20 minute(s), 1 hour(s), every 1 day(s)	—	10/09/2013 01:20:02 +0300	
		Dynamic Routing Manager	every 30 minute(s)	—	10/09/2013 16:25:04 +0300	
		Events Manager	every 5 minute(s)	—	10/09/2013 16:25:09 +0300	
		Factors Watcher	every 5 minute(s)	—	10/09/2013 16:26:02 +0300	
		Files Collector	every 10 minute(s)	—	10/09/2013 16:25:06 +0300	
		Files Downloader	every 5 minute(s)	—	10/09/2013 16:22:03 +0300	
		Invoicing Manager	20 minute(s), every 1 hour(s)	—	10/09/2013 16:20:04 +0300	
		Log Rotator	10 minute(s), 1 hour(s), every 1 day(s)	—	10/09/2013 01:10:02 +0300	
		Mail Manager	every 5 minute(s)	—	10/09/2013 16:25:08 +0300	
		Notificator	5 minute(s), every 1 hour(s)	—	10/09/2013 16:05:04 +0300	
		Packages Manager	every 3 minute(s)	—	10/09/2013 16:26:03 +0300	
		Rates Notificator	every 5 minute(s)	—	10/09/2013 16:22:04 +0300	
		Report Generator	every 16 minute(s)	—	10/09/2013 16:13:03 +0300	
		Statistics Manager	20 minute(s), every 1 hour(s)	—	10/09/2013 16:20:03 +0300	
		Statistics Watcher	10 minute(s), every 1 hour(s)	—	10/09/2013 16:10:02 +0300	
		XML-RPC Server	every 10 minute(s)	—	10/09/2013 16:25:04 +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	*Calling Cards* manager process
Cleaner	Utility that automatically cleans old messages from *Events Log* section
Dynamic Routing Manager	Utility that creates routing tables used in Dynamic Routing feature
Events Manager	Process that sends events to e-mails according to *Events Config*
Factors Watcher	Utility that controls *Factors Watcher* 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.

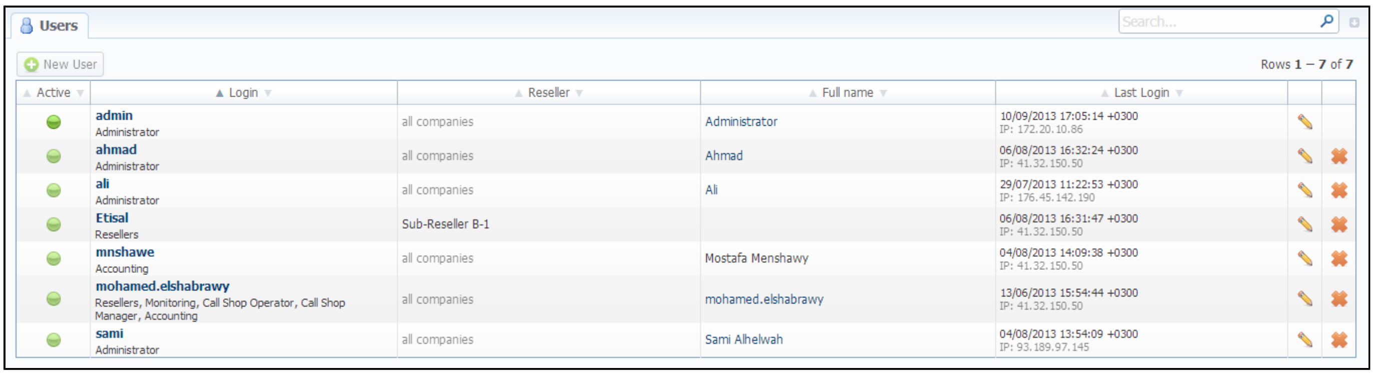
Users

On this page

Users Section Main Window

This section displays system's registered users (Screenshot):

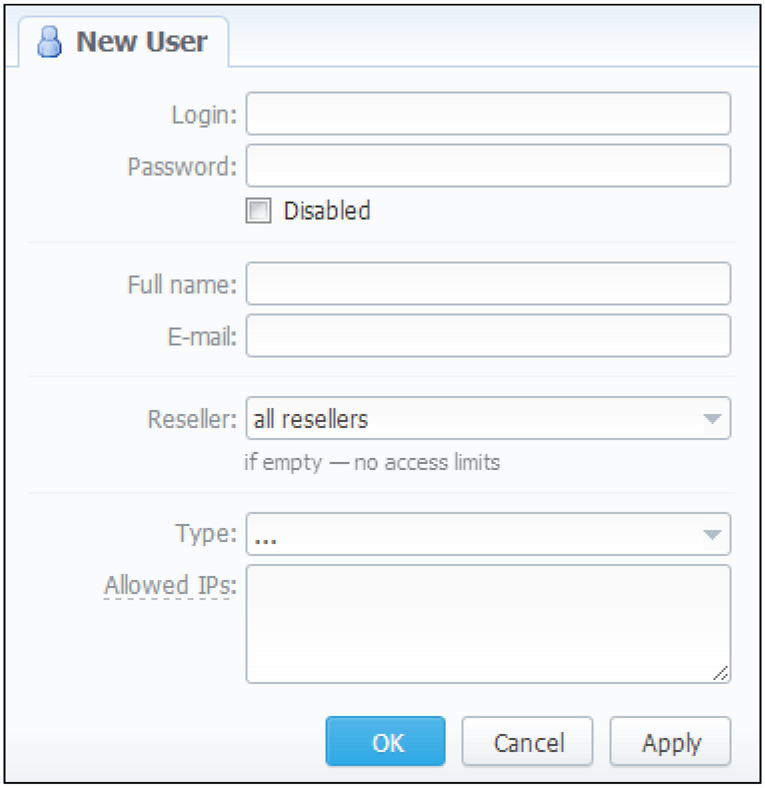
Screenshot: Users section main window



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



Tip: Each user can have multiple roles.

Roles

On this page

Roles Section Main Window

This section allows to specify access rights for different sections of the system (Screenshot):

Screenshot: Roles section main window

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

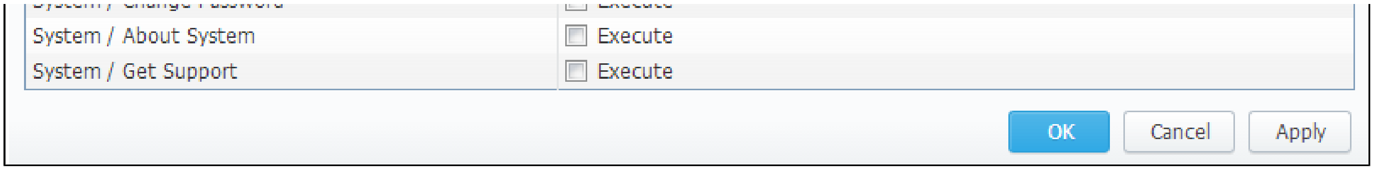
New Role

Name:

Default Module: Management / Clients

ENTRIES

Name	Access Permissions
Management / Clients	Full Delete, Read, Write
Management / Rate Tables	Read, Write
Management / Invoices	Read, Write
Management / Transactions	Execute, Read, Write
Management / Balance Report	Execute
Management / Resellers	Full Delete, Read, Write
Retail / Calling Cards	Read, Write
Retail / Top-up Cards	Read, Write
Retail / Call Shops	Read, Write
Retail / Packages	Read, Write
Retail / DID Management	Read, Write
Statistics / Dashboard	Execute
Statistics / Summary Report	Billing data, Execute
Statistics / Orig-Term Report	Billing data, Execute
Statistics / Profit Report	Execute
Statistics / LCR Lists	Execute
Statistics / CDRs List	Execute
Statistics / Mismatches Report	Execute
Statistics / Calls Rerating	Execute
Statistics / Reports to E-mail	Read, Write
Statistics / Archive Management	Read, Write
Tools / Rates Analysis	Execute
Tools / Rates Generator	Execute
Tools / Active Calls	Execute
Tools / Factors Watcher	Read, Write
Routing / Routing Plans	Read, Write
Routing / Routing Analysis	Execute
Routing / DR Policies	Read, Write
Configuration / Code Decks	Read, Write
Configuration / Currencies	Read, Write
Configuration / Payment Accounts	Read, Write
Configuration / Payment Terms	Read, Write
Configuration / Payment Gateways	Read, Write
Configuration / Time Profiles	Read, Write
Configuration / Taxes Profiles	Read, Write
Configuration / Groups	Read, Write
Configuration / Invoices Templates	Read, Write
Configuration / VoIP Gateways	Read, Write
Configuration / Settings	Read, Write
System / Events Log	Read, Write
System / Mail Queue	Read, Write
System / System Status	Read, Write
System / Task Scheduler	Read, Write
System / Users	Read, Write
System / Roles	Read, Write
System / Change Password	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).

Password Change and Logout

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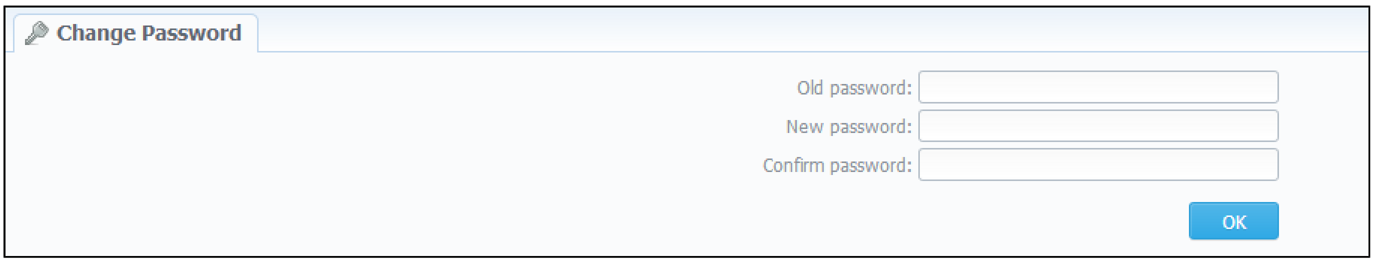
Changing Current Password

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

Screenshot: Change Password menu



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

Logging Out From System

You can logout from system by using *Logout* menu (Screenshot):

Screenshot: Logout menu

Customer's Portal

Customer's Portal is a control panel that can be used by client to check his balance and statistics.

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.

Customer's Portal consists of 2 sections:

Section	Description
Management	Allows viewing of client and balance information (*Client Info* subsection), call rates for current client (*Rates* subsection), sent invoices (*Invoices* subsection) and topping up one's balance (*Payment Gateways* subsection)
Statistics	Allows viewing of client's own statistics – summary (*Summary Report*), detailed (*CDRs List*) and accounting (*Balance Report*) reports

Password change procedure is same as for administrative interface user.

You can log out from customer's portal by using *Logout* menu.