

JeraSoft Billing 3.9

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JeraSoft Development is pleased to announce the release of its new billing platform version, the JeraSoft VCS 3.9. It introduces a number of additions and improvements to the carrier-grade VCS billing platform. This document describes the features with largest impact on system's functions and also provides information regarding their usage.



Please Note!

Starting from 3.9, HTTPS (port 443) is used to access the web interface of the system instead of HTTP (port 80).



Please be aware that starting from the version 3.9 JeraSoft VCS works with PHP 5.5.



It should be admitted that there is an important change in platform requirements for JeraSoft VCS, i.e. server timezone must be UTC only without an ability to automatically change it.

General Changes

1. New feature appears in Clients section, such as Mass Edit. This option enables mass editing clients "Last Invoiced" parameter. This functionality is useful if it is needed to re-generate all invoices from some previous time period.

Screenshot: "Mass Edit" feature in Clients List

ID	Name	Available	Live	Fixed	Pay Terms	Groups	Reseller
275	Man Scarlet C1#1	2 345.00 USD	0.00	0.00	—		Man Scarlet C1
277	Man Scarlet C1#2	18 712.00 USD	18 703.00	18 000.00	—		Man Scarlet C1
276	Man Scarlet C2#1	1 222.00 USD	0.00	0.00	—		Man Scarlet C2
270	MTS Client #2	9 999 905.00 USD	-90.00	-90.00	—		Manager MTS #1
21550	MTSPackage Client #1	4 778.00 USD	-222.00	-1 200.00	—		MTS

2. From now on, the clients' available credit is displayed in *Client panel Client Info section*.

Screenshot: Client panel

Client Info

System Name: ConnectLateTax
 Company Name: ConnectLateTax
 Address: St Katherines' Way
 E-mail: test@tax.net
 Balance: -50 772.38 USD
 Available: 149 227.62 USD

- As far as it is required by [Authorize.net](#) also to transmit information about Credit Card Expiration Date for submitting a credit card transaction request to the payment gateway, the respective field appears in *Client panel Refill Balance section*.

Screenshot: Refill Balance section

Refill Balance

Here you can add funds to your balance by using your PayPal account.

Recommended recharge for: 1 348.00 USD

Please note, after you entered your card data, we automatically create payment profile for Authorize.Net. Then, after payment profile is created, your reseller and you can charge money from your payment profile automatically. So, next time you will not have to enter credit card data. Also note, you can add card data via https only.

Credit Card Number:
 Expiration Date: MM-YYYY
 CVV:
 Amount: 45

Process

- Starting from the current version the default type of client will be prepaid.
- From now on, in *Clients section - Package tab* you can specify package *Deal Start Date* and *Deal End Date* during its adding process.

Screenshot: Clients window - Package tab

Client Info Custom Fields Presets Packages DIDs Notes

+ Add Package

Client's package name:

Assign to: Whole client

Deal Start Date:

Deal End Date:

Quantity: 1

Align to Payment Terms
 Recalculate to Period

Add

are no packages assigned

- Now it becomes easy to define the type of a client with the help of icons on the main page of the *Clients list*, also you can filter your clients by type using the search form.

Screenshot: Clients List

ID	Name	Balance			Pay Terms	Groups	Reseller
		Available	Live	Fixed			
4205	Customer 1	114 829.69 DKK	-14 885 170.31	-1 897.85	Every day	RESELLER A	
11	Customer A	-335.00 DKK	-435.00	3 445.30	Monthly	RESELLER A	
22	Customer B	9 475.87 USD	-524.13	-276.24	Monthly	Reseller B	
27	Customer D	1 404.00 DKK	-3 596.00	-320.00	Monthly	RESELLER A	
39	Customer E	97 345.64 DKK	97 345.64	100 000.00	2nd day of month	Reseller B	
25	Customer F	6 514.11 DKK	-1 485.89	-1 836.68	6th day of month	RESELLER A	
34	Customer G	No Limit DKK	-1 284.05	-99.24	Monthly	RESELLER A	
31	Customer H	-10 495.24 DKK	-13 495.24	-12 449.24	Monthly	sfsdfs	
21	Customer I	3 651.03 USD	3 650.03	4 021.05	Monthly	Reseller B	
20	Customer J	16 350.12 1/2USD	15 549.12	19 607.84	Monthly	RESELLER A	
15	Customer K	15 436.34 DKK	-4 563.66	-2 626.99	Monthly	RESELLER A	
23	Customer L	8 528.99 1/2USD	-11 471.01	-11 015.58	Monthly	Reseller B	
28	Customer M	-1 562.10 DKK	-2 062.10	-4 471.58	Monthly	RESELLER A	
16165	Customer_one	2 500.00 TEA	0.00	0.00	Monthly	RESELLER A	
16166	Customer_two	5.00 USD	0.00	0.00	Every day	Kyvistar	

- When the package is recalculated according to some specified period, its Volume limits are also recalculated according to payment terms.

8. Packages with some number of DIDs can be assigned either to *Whole client* or to certain *Account*. If such package is assigned to *Whole client*, DIDs can be easily added to each account of this client respectively in *Clients - DID Management section*.
9. Files export with Cyrillic alphabet to *.xls format* is working correctly.
10. In case, when several identical packages are assigned to one client, the first will be billed the package which ends earlier then the other one.
11. Ability to import alphanumeric codes from Code decks is perfectly working.
12. Now entering several Code Names is simplified, i.e. if you need to specify more than one Code Name use Enter button for separation.
13. From now on, the variable $\${client\{currency\}}$, used for *Low balance notification* mail template, also can be used for *Invoice* mail templates (mail templates can be configured in *Reseller Settings section*).
14. Starting from the version 3.8.7 the server time and DB time should be set to UTC (Coordinated Universal Time). This may lead to statistics corruptions in case any of your switches do not send timezone in RADIUS accounting records and/or in CDR files. Check out this page *How to switch time zone in UTC on the server properly?* for more information.
15. From now on, the web interface works via HTTPS, it's not possible to make the request over port 80 (HTTP).

Accounting

1. Now it is possible to **assign different VoIP Gateways** to several **accounts with the same IP addresses** and Tech Prefixes.
2. There are some restrictions in case you want to change a reseller for a client or an owner of a manager. A reseller will not be changed if accounts of this client have assigned VoIP Gateways that are not allowed for new reseller. Also please note that if you add a VoIP Gateway to the reseller, this reseller will be automatically added to the list of allowed resellers for this VoIP Gateway and vice versa.
3. There are some changes in Balance report, i.e. the Start and End Balance calculation behaviour is changed. In addition, if there is no data for the current period to display, the Balance report will show the information based on invoices or payments of previous periods (if it exists).
4. From now on, invoices with attached CDRs include field "*Orig Group*". This field shows the Origination Group a client belongs to.

Configuration

Invoice Templates

New variable $\{balance_current\}$ appeared in Invoice Templates. This variable shows current balance at the end of invoicing period (with current invoice).

Payment Gateways

The field "*Fee*" has been improved. From now on, you can specify percentage or fixed fee value or both, that will be charged from your client like additional fee. For instance, you charge from your client additional fee at the value of \$4.20 and your client want to top up its balance on \$100, then the total sum for this client to recharge will amount to \$104.20. Moreover, your clients will see not only the amount they want to top up theirs' balance on, but also the fee amount and total sum for recharging in *Client panel Refill balance section* (screenshots below).

Screenshot: *PayPal payment gateway*

ORDER POSITION: 0

PAYPAL

E-mail: You PayPal e-mail, payment recipient.

Gateway Currency: U.S. Dollar (USD) Currency which will be used by user to perform a payment.

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

System Currency: USD This setting reflects currency of the gateway. Amount received will be treated as specified currency. Leave empty if not required for the gateway (eg. top-up cards).

Amount Limits: Possible values for top-up separated by comma (eg "5, 20, 100"). If empty — user can specify any value. Field should be empty for top-up cards.

Payment Account: General Specify account which will be used for transactions from this payment gateway.

Description: 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.

Screenshot: *Client panel Refill Balance section*

Refill Balance

Here you can add funds to your balance by using your PayPal account.

Amount: 100 USD Fee: 4.20 USD Total: 104.20 USD

QIWI QIWI

Authorize.Net

PayPal PayPal

Settings

From now on, you can set the state (such as *normal*, *to sent* or *to verify*) for all automatically created invoices by going to *Configuration - Settings - Invoicing Settings*.

Tax Profiles

Tax Profiles functionality is improved. Additional field called "Rate Group" is added for each tax value. This field defines a rate group respective tax value should be applied to.

VoIP Gateway Integration

We are happy to announce that JeraSoft VCS has been successfully and fully integrated with **Squire MGC and Squire SBC**.

Files Collectors

From now on, the standard calls processing on checking a call on its uniqueness does not include *Disconnect time* and *Session time*. That is done for preventing appearance of duplicates on RADIUS/Files collecting.

Aloe MVTs Pro (ver >= 1.8.1-20f) Files Collector

This files collector has been modified, i.e. in case when allowed time in the auth packet is 0, then Access Reject packet will be sent back to the client.

Sonus SBC 5200 Files Collector

We are glad to introduce new collector **Sonus SBC 5200** for new version of *Sonus Switch*. This collector understands the CDRs of new format provided by Sonus Switch. In addition, the call-id value from the *field 52* is used for origination and termination legs. As for *custom field*, it puts call-id values from the *field 52* – for origination leg and from the *field 69* – for termination leg respectively.

Rates Management

1. As we previously announced [JeraSoft expanded partnership with Telarix iXLink Interconnect](#). And VCS has the ability to integrate its products to the iXLink platform.
2. Rates importing process has some improvements. That is, appearance of *codes optimization* during rates import. This optimization allows to shorten codes of the code range which you are importing.

Screenshot: Rates Import section

FILE PROCESS

Select file to import: No file chosen

Fields Delimiter: autodetect

IMPORT PROCESS

Rate Group: Default

Date Format: auto | auto

Custom date format:

On duplicate rates: Update with latest value

Full A-Z import:

Close date: 2015-03-18 13:00:00+0200

Import template:

Deck update mode: Do not import anything to code deck

Code deck: UA codes

On errors: Import correct rows and show all found

Notificator Code Deck:

Enable confirm mode:

Optimize codes:

Process »

3. Searching by code or code name in Rate tables is worked with the accurate match.
4. Now you can easily add rate with negative value using *Rates Generator tool*.
5. Please note that now unconfirmed rates do not have any affect on the rates change calculation.
6. Auto-detection of date and time is enhanced in *Rate Tables - Import section*.

Screenshot: Rate Tables - Import section

FILE PROCESS

Select file to import: No file chosen

Fields Delimiter: autodetect

IMPORT PROCESS

Rate Group: Default

Date Format: auto | auto

Custom date format:

On duplicate rates: Update with latest value

Full A-Z import:

Close date: 2015-03-18 13:00:00+0200

Import template:

Deck update mode: Do not import anything to code deck

Code deck: USA upload

On errors: Import correct rows and show all found €

Notificator Code Deck:

Enable confirm mode:

Optimize codes:

Process »

Please pay your attention that autodetection of date and time can be performed with files that contains one of the date and time formats listed below:

- %d-%m-%Y = 28-12-2002
- %Y-%m-%d = 2002-12-28
- %m/%d/%Y = 12/28/2002
- %d.%m.%Y = 28.12.2002
- %Y/%m/%d = 2002/12/28
- %Y%m%d = 20021228
- %Y-%m = 2002-12
- %H:%M:%S = 21:13:14
- %H.%M.%S = 21.13.14.

Retail

Packages

Package settings are enlarged and improved. First of all, appearance of *Custom Fields* that can be used in invoice template as custom functions (Screenshot below).

Screenshot: Packages settings - Custom Fields

Besides, *Fees settings* are brought out in separate section where you can add fees of different types (activation or subscription), specify the name of a fee, set a rate of a fee, etc. (Screenshot). Further, all information concerning package fees can be displayed in invoices.

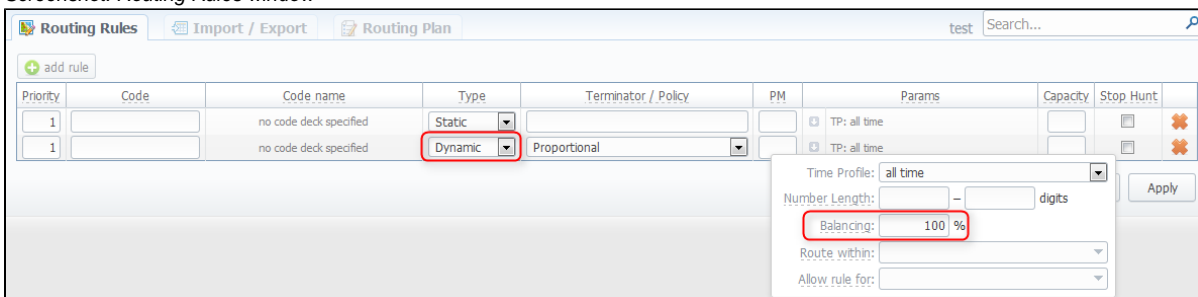
Screenshot: Package settings - Fees

Fee Type	Fee Name	Fee Note	Rate, USD	
Subscr	Periodical fee		2.5	
Activat	Activation fee		0	
Activat			0	✖

Routing

1. JeraSoft VCS now supports new LNP provider PCT.
2. LNP dips for *Vera Networks* and *Broadvox* databases will not be executed for calls to DID numbers registered in JeraSoft VCS.
3. From now on, JeraSoft VCS is supporting *NANPA database* for determining jurisdiction for US calls. Plus, Jurisdiction manager is available in web-interface, and can be found in *System - Task Scheduler* section.
4. Additional possibility in *Routing Rules*, which allows to balance calls between static and dynamic rules. This possibility can be set in additional dynamic rule parameters in the field called "*Balancing*".

Screenshot: Routing Rules window



5. There is a change in Routing Plans rules processing, i.e. the DR Order "*by appeal*" is renamed to "*by appeal / code*". According to this DR Order, routes are ordered first by appeal value and then by the longest code.

Tools

Active Calls section

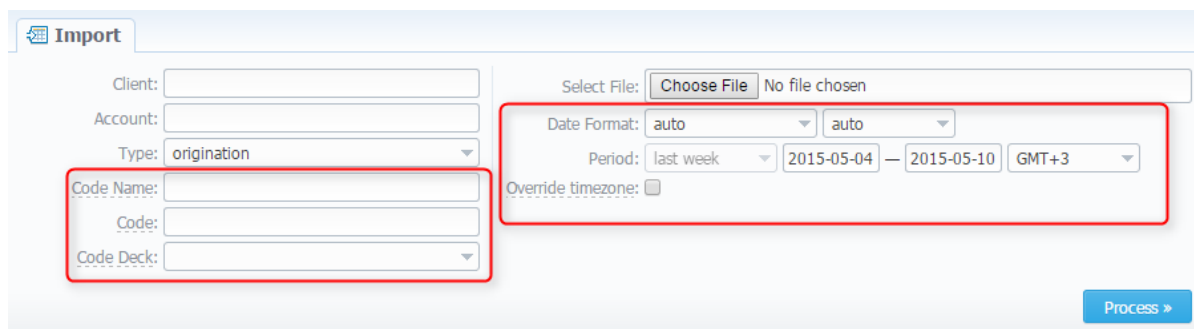
Active calls monitoring process has been modified. From now on, the system checks that your VoIP Gateway sends to JeraSoft VCS, firstly RADIUS Accounting Start packets and then RADIUS Accounting Stop packets. If not, the call will be skipped.

CDR Disputes

There are some improvements in CDRs Disputes Module. Mostly, the improvements concern the CDRs importing process, they are the followings:

- additional *filters*, i.e. filtration can be made by *Code Name*, *Code and Code Deck*;
- possibility to choose *period* that you want to be imported for the new dispute;
- possibility to specify *timezone* of the importing CDRs list, in addition to this functionality there is the "*Override timezone*" checkbox that allows to change a timezone in the importing file on the timezone specified above.

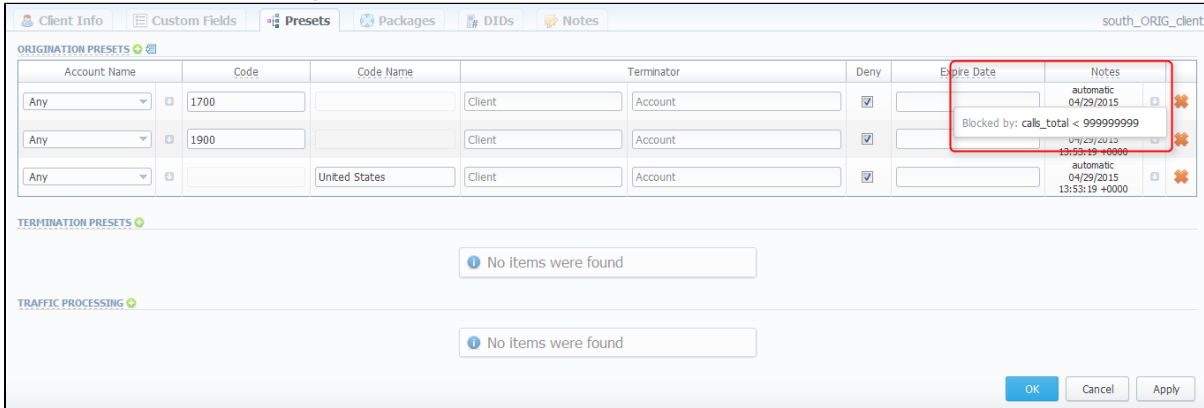
Screenshot: CDR Disputes - Import Section



Factors Watcher

1. Starting from this version, *Factors Watcher* automatically notifies clients on what code or code name was blocked and why. In addition, the field "*Note*" in *Presets* section becomes more informative, now you will see when the preset was created, in what way (i.e. manually or automatically) and the blocking factor that was used for the code or code name.

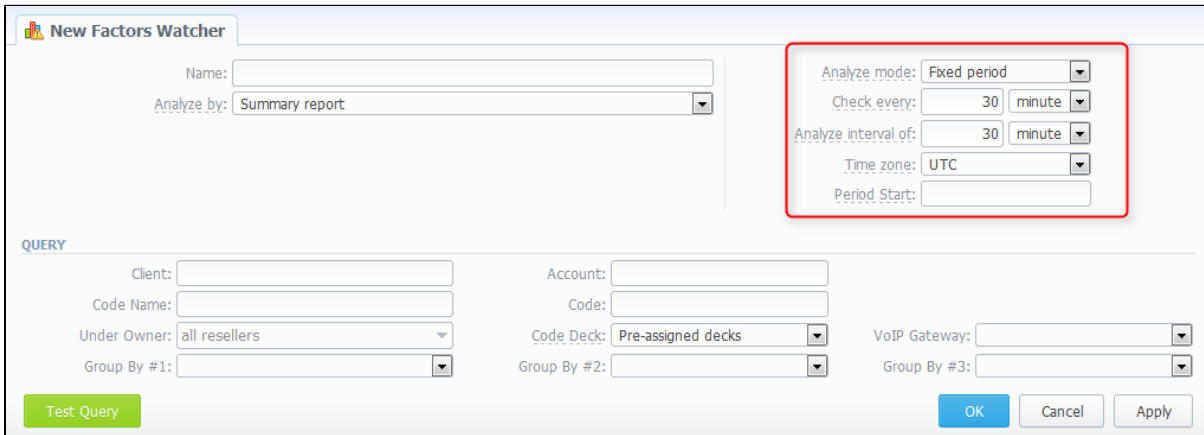
Screenshot: Autocreated Presets by Factors Watcher



2. Factors Watcher enlarged functionality allows you to:

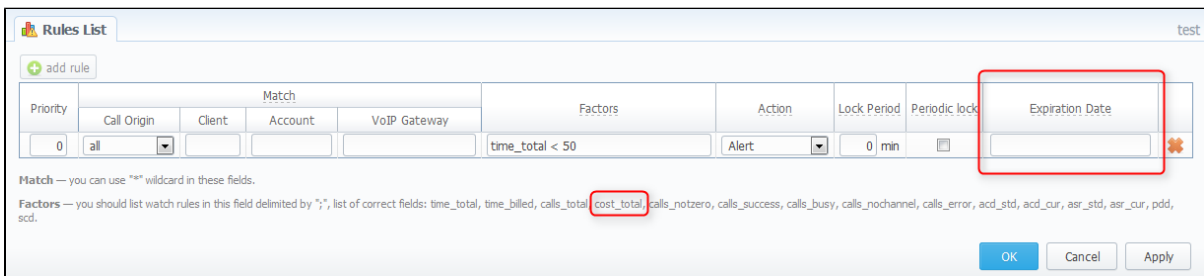
- choose the type of period which to analyze, there are two available types - fixed and calendar periods;
- set how often to perform checks;
- specify the interval of time to analyze during checks;
- define the timezone that should be used when pulling reports or blocking routes;
- enter the period start, i.e. the specific time to count the period from.

Screenshot: Factors Watcher main window



In addition, you can set *Expiration date* to each rule in respective field for automatic removal of this rule. And "cost_total" variable is added for watch rules.

Screenshot: Factors Watcher - Rules list



Rates Analysis

1. The "Rate Group" field is added to *Rates Analysis search form*. In this field you can specify a group to which the rates belong.

Screenshot: Rates Analysis Search Form

2. Now the accounts information is displayed in resulting table of rates analysis.

Rates Generator

Rules functionality in *Rates Generator* is improved. Appearance of the "Rate Group" field in *Rates Filter* section. This means, that rates filtration will be made by defined group.


Screenshot: "Add Rule" window

Statistics

1. Currently, Orig-Term Report is built using `dst_number_bill` parameter instead of `dst_number_ext`.
2. In case if a client was moved from one reseller to another, the Summary Report will be generated for this client based on the state at the time of the call.
3. From now on, Orig-Term report and Rates Analysis can be also generated for customer or vendor that have rate table assigned directly to one of its accounts.
4. Grouping in reports is done according to the timezone that was specified.

System

Audit Log

Audit Log functionality is enlarged. From now on, you can access this section from *Clients List*, *Accounts* and *Resellers* sections by clicking on the following  icon. In addition, in *Audit Log* you can see:

- information not only by whom the changes or actions were made, but also the IP address from which the user logged to the system;
- full lists of settings of a created client.

Plus, the list of changes was minimized and the full list will be displayed only on click.

API Testbed

API Testbed is the new separate section in the web interface, that allows to send/receive JSON-RPC API calls.

It gives ability to fill common parameters:

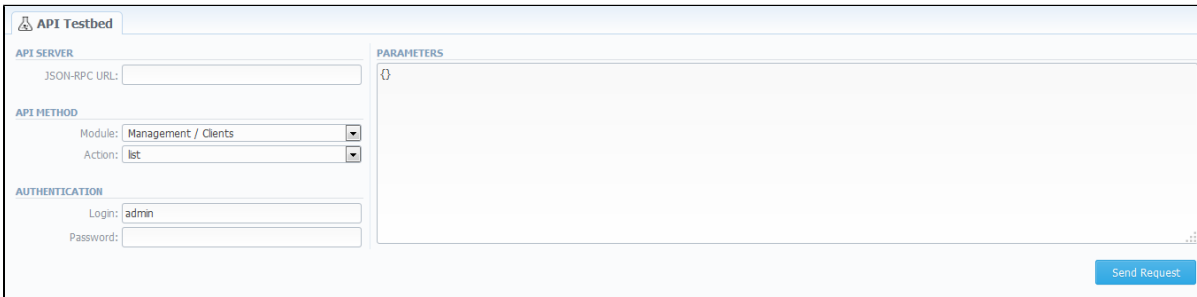
- JSON-RPC URL - defaults to current server settings;
- Module / Action - which module and action to call;
- Login / Password - which credentials to use during the call;
- Parameters - JSON data that will be sent to the API.

After the send request is pressed you will see:

- API Request - full JSON message that has been sent;
- API Response - full JSON response from RPC server.

Both request and response are shown as JSON tree with ability to switch to RAW JSON.

Screenshot: *API Testbed Section*




Please note that when you update the system to the latest version in case of using RADIUS and/or SIP integration the **average downtime** is about **10 minutes**. However, this interval is just an average and it depends on existing differences between versions plus the time needed to regenerate a routing table by Dynamic Routing manager.

System Status

Application names in *"Database sessions"* section are displaying in respective column. This makes system monitoring through web much more convenient.

Screenshot: *System Status section*

ID	Application	Session Start	Query Start	Duration	Query
16285		23-12-2014 16:57:35 +0200	23-12-2014 16:57:35 +0200	00:00:00	SELECT *, (now()-backend_start) AS duration FROM pg_stat_activity WHERE TRUE AND 'datname' = 'vcs' AND 'username' = 'vcs' ORDER BY 'duration' ASC
461	SIP Redirect Server	23-12-2014 12:09:20 +0200	23-12-2014 12:11:12 +0200	04:48:15	IDLE
460	SIP Redirect Server	23-12-2014 12:09:20 +0200	23-12-2014 12:09:42 +0200	04:48:15	IDLE
457	SIP Redirect Server	23-12-2014 12:09:20 +0200	23-12-2014 16:56:43 +0200	04:48:15	IDLE
1213	RADIUS Server	23-12-2014 01:10:22 +0200	23-12-2014 16:57:35 +0200	15:47:12	IDLE
1212	RADIUS Server	23-12-2014 01:10:22 +0200	23-12-2014 16:57:35 +0200	15:47:12	SELECT a.name AS account, a.id AS id_accounts, a.id_clients, a.tech_prefix, a.password, a.orig_capacity, a.term_capacity, a.orig_enabled, a.term_enabled, a.orig_groups, a.term_groups, c.name AS client, c.prepaid, c.bill_by_time, c.id_companies, c.id_companies_real, c.id_currencies, c.status, c.locale, c.type, c.id_companies_parents, c.orig_capacity AS c_orig_capacity, c.term_capacity AS c_term_capacity, (co.balance + c.credit) AS balance, (c.status <=> 'active') AS c_deny, c.type AS client_type, COALESCE(c.tz, 'Etc/GMT-7') AS tz, co.orig_capacity AS co_orig_capacity, co.term_capacity AS co_term_capacity, (co.status <=> 'active') AS co_deny, cur.name AS currency_name, rt.id_code_decks, rt.id AS id_rate_tables, COALESCE(a.id_dr_plans, c.id_dr_plans, co.id_dr_plans) AS id_dr_plans, (CASE WHEN COALESCE(rt.with_1
1211	RADIUS Server	23-12-2014 01:10:22 +0200	23-12-2014 01:10:22 +0200	15:47:12	IDLE
1205	RADIUS Server	23-12-2014 01:10:22 +0200	23-12-2014 16:57:34 +0200	15:47:12	IDLE
25284	XML-RPC Server	19-12-2014 16:43:02 +0200	19-12-2014 16:43:02 +0200	4 days 00:14:33	IDLE

Users

Please note that now users cannot be deleted from the system in *Users section*. They can just be disabled in user edit form by clicking on the respective check box.