JeraSoft Billing 3.10

On this page:

JeraSoft is excited to announce the new major release of **JeraSoft VCS 3.10** billing platform version.

This page is a guided tour of the system's highlights, recommendations, useful additions.
Typically, this major release includes all minor releases in-between (from 3.9.1 to 3.10.2).
And this document digs into numerous changes of these minor versions and provides information regarding its usage.

Privacy and Security

Our team is focused on taking reasonable care of our customers' privacy and security.
Hence, we provide the steps to ensure it. Please perform the following checks:

> ⚠ **Please perform the following checks:**
>
> - The existence of local user *"jerasupport"*;
> - The resolvability of a.jerasoft.net by DNS;
> - The SSH ports should only be opened for Trusted / Extended networks.
> - The ports *tcp/5432, tcp/6379* should be only opened between billing servers if you have several.
>
> **Note, that if the above conditions are not met, web system access will be blocked.**

Screenshot: "JeraSoft VCS Login page"
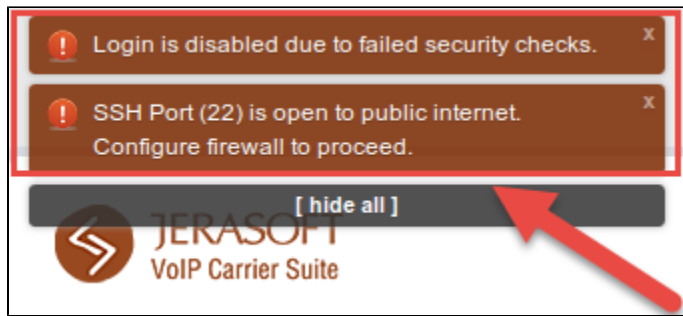
VoIP Gateway Integration

We are delighted to announce that **JeraSoft VCS** has been successfully and completely integrated with Cataleya Orchid One. This consolidation creates a stable, well-tested and carrier-suitable solution for users.

Now, your billing platform can function with **Cataleya Orchid One session** and **application manager**. This integration is critical to achieving fully functional **Call billing** via **CDR (SDR)** files, **Dynamic Routing (SIP)** and **Authorization** over **SIP Redirect** with Cataleya Orchid One solution.

You can find the instruction for configuration in our **Integration Manual.**

## General System Changes

Management section

Clients

1. Starting from the 3.9.1 version, ***Factors Watcher block*** notifications became optional, you can enable or disable a respective check box in the *Client form*.
2. The "***Postpaid***" **check box** appeared in the *Clients form*. It is disabled by default. If you enable the postpaid mode, the client has unlimited credit.
3. From now on, the "***Orig Group***" option is available in the *Client Info* form. And you can override *Orig Group* values from all accounts assigned to the client.
4. There are ***"Threshold" and "Capacity"* boxes** in the *Low Balance Control sub-panel* of the *Client Info form.*These settings allow to configure a balance limit and enter the capacity of the channel. When the balance is below mentioned in the *"Threshold"* field, the system applies special capacity settings

Screenshot: Clients settings

Client's Templates

The **Client's Templates** tab is upgraded. There are a new interface and functional properties. Please see the **Client's Templates** page for more details.

Screenshot: Client's Template tab
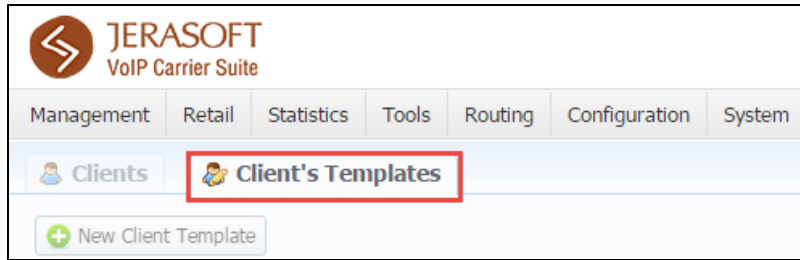
> ✅ **Tip:** If you do not specify the values *(i.e Groups, Credit, Rate Table, Routing Plan, Orig Groups, Capacity, Notify Client, Notify Admin)* in the *Client Info* form, the **Client's Templates** allow to take the following values from templates (that is during authorization).
>
> But these values **will not be shown** in the *Client Info* form.
>
> For example, when there are no values in the *Client Info* form, the system takes them from assigned template. When there are no values in the template assigned to the Client, they are taken from *Manager/Reseller's settings*.

Now the **Manager/Reseller** can set the **Client's Template** in *Reseller section.* Therefore, this template will be used under this Reseller or Manager by default.
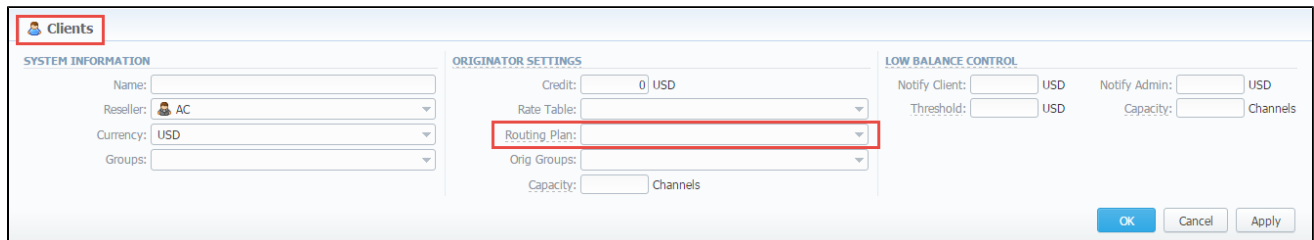
All you need to do:

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

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

> ⚠ Please note, that several fields such as **Bill calls by, Client's package name, Access of the Client Panel** have been removed by architectural considerations.

Screenshot: Clients form

> ⚠ The **values overridden from templates are only displayed in the *Client list***, for example, *Routing Plan, Rate Table, Credit.* They will not be shown in the Client's account.

Functional properties of the Clients Templates:

- If there are no specified values (such as *Groups, Credit, Rate Table, Routing Plan, Orig Groups, Capacity, Notify Client, Notify Admin*) in the *Client Info* form, it overrides these values from the closest template.
- The closest template is considered a first template that is found in the following chain: *Client his Manager his Reseller.*
- If there are no found values mentioned above in the closest template, a further search stops and values are not defined.
  When you delete the template, there is a remove validation. The pop-up window with notification will appear. This template shouldn't be in usage by Client, Manager or Reseller.

Screenshot: Removing template
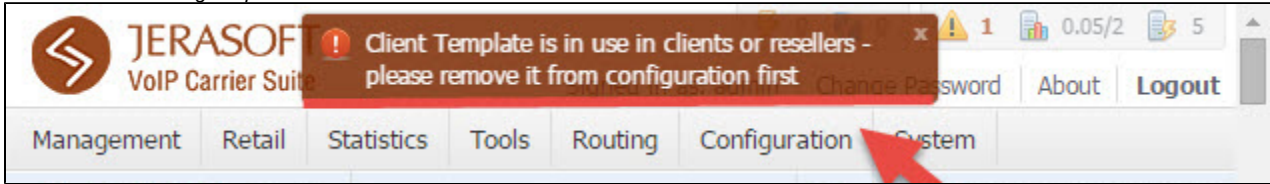
- Now the *Routing Plans* and *Rate Tables* sections have the same drop-down list of available templates for the *Client/Reseller.*
- The change of the *Reseller* proceeds without any checks of application of this template by the *Client/Manager/Reseller.*
- The currency in the *Client's Template* and the currency of the customer to which it applies should be the same to work properly.
- All *Managers*, regardless of a nesting level, have an access to the full list of templates that only belong to their *Reseller.*

Rate Tables

The **"Extra Rate"** tab is modified and the calls within the assigned package will not be charged by "extra cost". Otherwise, the system bills a call with extra rate when the customer overcomes the limits of the assigned package or call destinations that are not included in the client's package.

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

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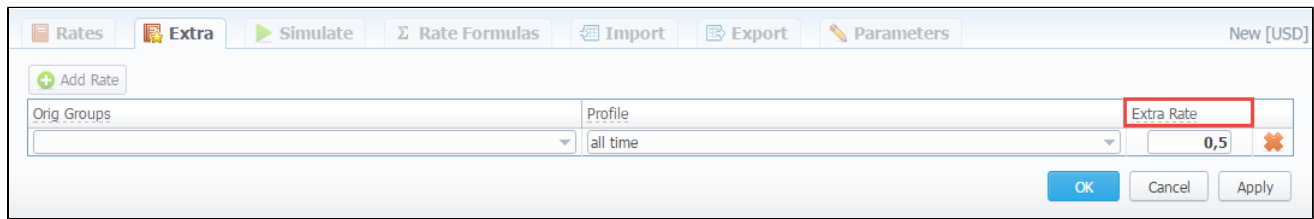
When you choose *"Alert me about duplicates"* in the **"On duplicate rates"** field in the **Rate Tables** section, please be aware there is a limitation of the alerts of rate duplication in the list **while importing**. It means that the **import process cannot proceed** if you get **more than 1 000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

Screenshot: Import tab - Rate Tables
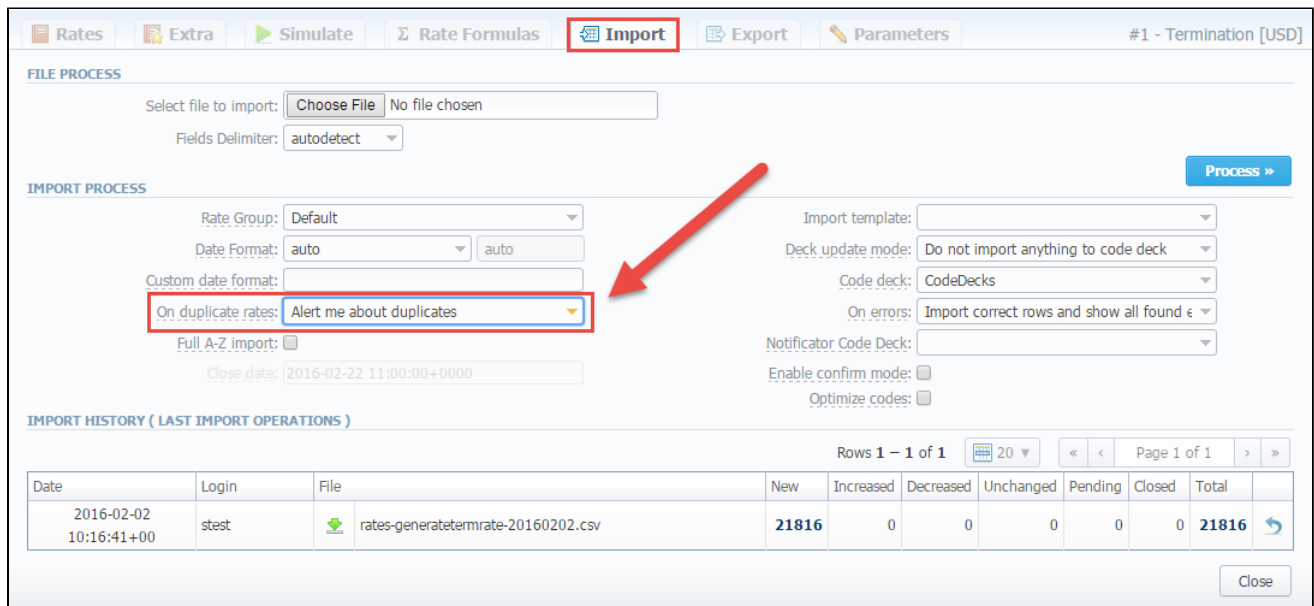
Invoices

Additional option **"Group"** of the search-filter is implemented in the *Invoices* section. You can select multiple clients' groups in search-filter in the *Invoices.* To access it, click the down arrow ⌄ on the **quick search toolbar**.

The variable **{total_cost_gross_text}** appears in the *pdf* **invoice template.** Use it for the text representation of the total sum for all charges. For correct functioning of the {total_cost_gross_text} parameter, the currency names should correspond to the official ISO 4217 standard, i.e. EUR, USD, CAD.

Moreover, there is a new variable **{to_pay}**, i.e the payable sum for specified invoice in the *Financial Summary* of invoices.

Also, it is possible to **arrange packages by numbers** in *Invoices* and *Invoices Templates*. While generating invoices, the system sorts packages in invoices. The package names could contain numerical symbols. Please use numerical symbols as *001 name, 002 name, etc.* in names of the packages. And avoid special symbols as *%001 name, -001 name.*
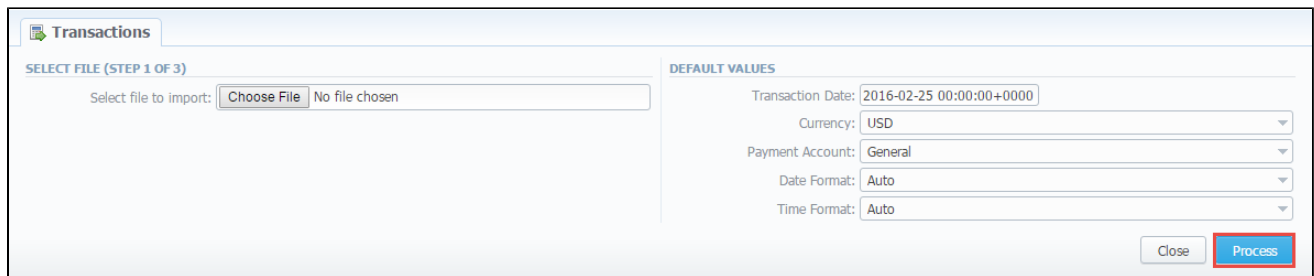
> ⓘ Please note, that the currency rate of extra charges will be taken on the date of charge, not on the date of invoicing.

Transactions

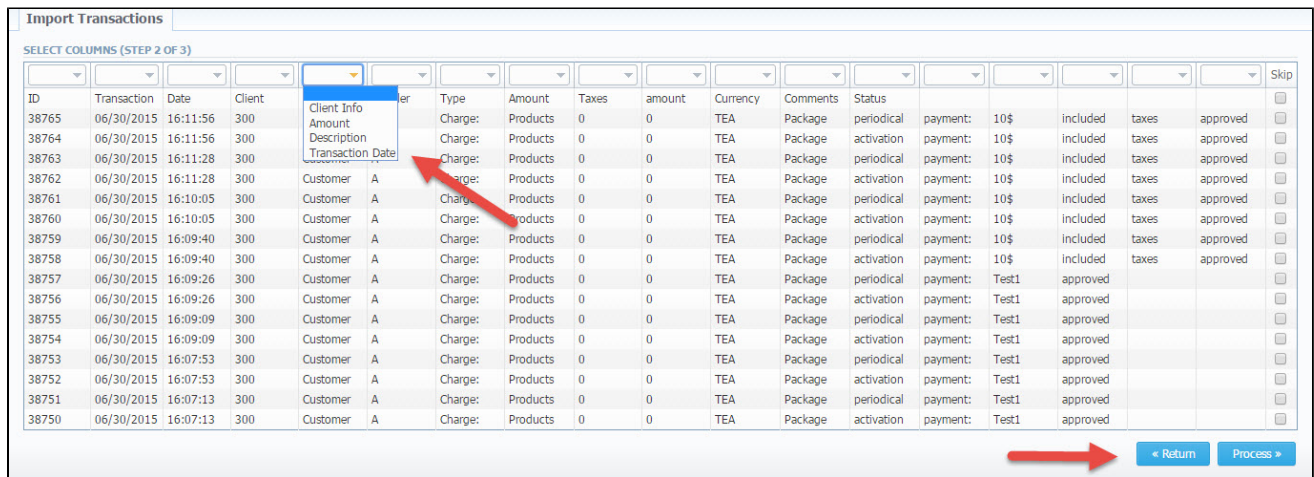Now the **"Import Transactions" process** is divided into two steps:

a) Select the file and specify additional parameters.

Screenshot: Transactions importing process. Step 1

b) Recognize the file. The system recognizes the file and you can make changes of data (for instance, switch columns) and click *"Process>>"* again.

Screenshot: Transactions importing process. Step 2

1. The *taxation* option is accessible in the *Transactions*. It allows to set an amount and choose whether a specified amount includes a tax or not.

Screenshot: Transactions section

⚠️ If you choose **"Include taxes"** option, the system calculates taxes and divide the total amount into 2 columns *(Amount/Taxes amount)*. Then, the system changes the option *"Include taxes"* to *"Exclude taxes"* in the settings of a respective transaction.

2. There is a new **"Info"** field in the *Transactions* form. Now, the user can add system information for *Transactions* and variables in the *Invoices Templates*.

3. As well as, the **"Payment Account"** option is modified and there are **Extra Charges Outgoing/Incoming**.

ⓘ Please note, that you will have the same type of payment account in invoices. Therefore, you can choose an outgoing or incoming invoice. The following charge will be shown in this invoice.

✅ If you need to give a refund to the client, **select an extra charges outgoing**, it will guarantee that this charge will be visible in the invoice.

Screenshot: Transactions form

ⓘ To quickly open the **Client Info** from the list of all transactions, click the name in the column **Client / Reseller**.

Screenshot: Transactions list

For a faster generation of the transaction list, we changed **the default value** of the **Group Charges** from Daily to **Hourly.** So, now it is **Hourly** by default.

To open the advanced search settings click the drop-down arrow 🔽 in the Search toolbar [Search...] in the **Transactions**.

Screenshot: Transactions Section/ Advanced Search toolbar

Balance Report

A new structure of the reports is implemented and the **Balance Report** section is updated respectively.

From now on, this section has a **new form of queries**. It allows creating useful analysis reports more painless and easily choose parameters that should be summarized, group data. The similar form is presented in the *Summary Report, Orig-Term Reports, etc.* Please refer to the article **"Balance Report"** in our User Guide to learn how you can execute new queries.

Screenshot: Balance Report section

Client packages

We improved the user interface and relocated the **Client Packages.** Now, it's a separate section of the system. To open it, point to the *Management, and* then click the *Client Packages*. Here you can see the full list of all packages, assign them to respective Clients or Accounts.

Please note, that the **API method** of workflow process of the **Client Packages** is changed.
Therefore, you need to modify the API method to work with packages. You can check modifications in the **System - API Testbed.**

Screenshot: Client Packages section
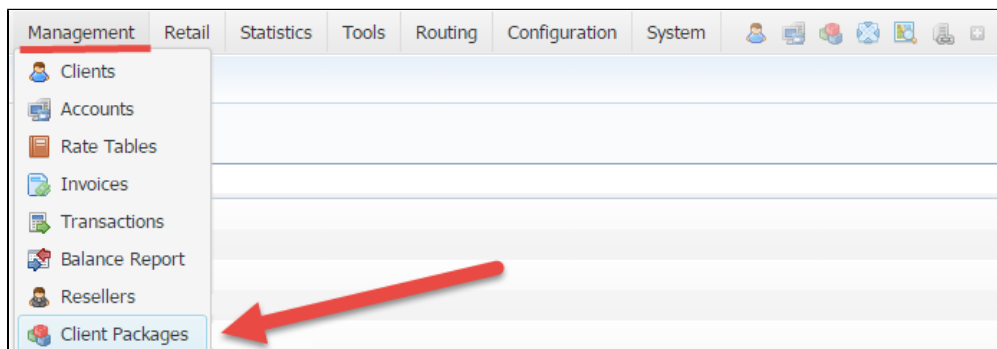
From now on, you can also assign packages to the *Resellers* in this section.

As we continue to evaluate the design of our system interface and we changed the view of the **"Volume Limits"** and added separate column **"Timezone"** in the *Client Packages* section.
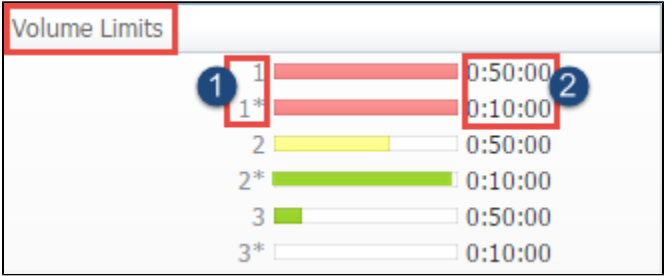
Screenshot: Client Packages settings

Now the **Volume Limits** bar **graphical displays the data.**

1. On the left side of the bar, it shows the *destinations, code or code names.*

2. On the right side, it shows a *specified limit* (see screenshot below).

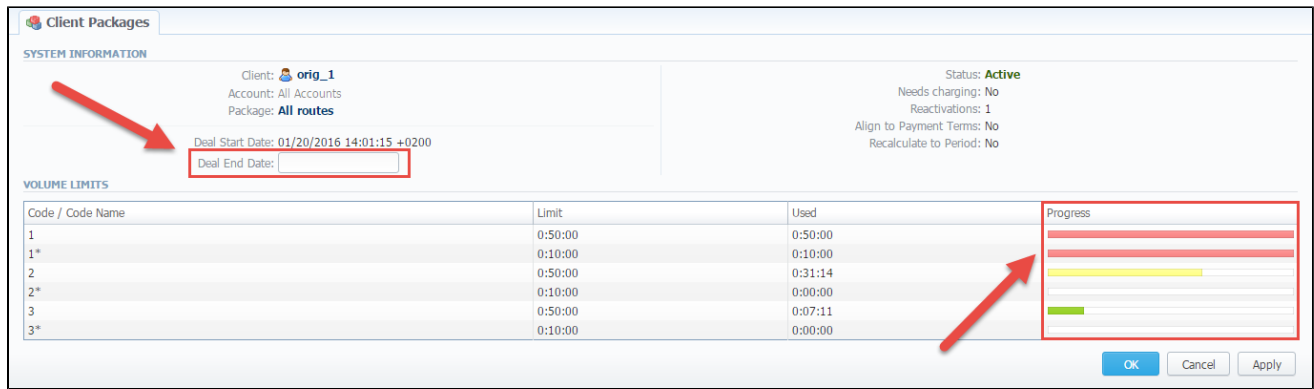*Screenshot: Client Packages settings/ Volume Limits bar*

Also, there is a possibility *to edit the "Deal End Date"* in the *Client Packages.* Click the icon *"Edit Client Package"*
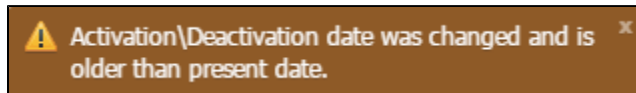

in the full list of existing client packages. The view of the *Client Packages edit form* is modified due to the changes of the *Volume Limits.*

Screenshot: "Client Packages" edit form

In the previous version, the system didn't allow to assign the package with an expired date. And the following error was shown by the system:

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

> ⊘ You should run the Package Manager several times until the current period of the package or its end date.

> ⓘ When you edit the *"Deal End Date"* field of already assigned package, transactions will not remain unchanged.

> ⊘ If you click the delete icon ✖ (i.e. **remove an archived package entirely**) in the *Client Packages* section you will delete a package with all transactions from the system. Also, this package will be removed from the *Client Info* form.
>
> **To delete the package completely you need to do the following:**
>
> - delete the package from the list in the Client Packages section
> - open System/Task Scheduler section
> - run Packages Manager
> - return to the list of packages in the Client Packages section
> - sort the list of packages by the status "archive"
> - find a respective package and click the delete icon ✖ to remove it completely from the system.

Retail section

Packages

1. The **"Recalculate to Period"** feature of the *Billing settings* sub-panel is upgraded.
   Now the system recalculates the subscription fees according to **an actual number of days** in a month (including 28/29 days in February).

2. The new feature **"Charge on call"** allows applying charges to respective customers only after the start of usage of this package. To use it, tap the **"Charge on call"** check box. When it's selected, the *Subscription fee* will be charged after the first call within this package is made by the client to whom that package is assigned.

3. From now on, you can set both types (Money/Time) of **Volume Limits** within the same package. Previously, you may only choose one limit type.

   Screenshot: "Packages" settings

DID

From this version forward, when a package with already assigned **DID number** is not active, the respective DID number will be in **"Hold"** status and routing destination is unreachable.

The **"Status Date"** and "**Hold Date"** fields in **the DID-Management → Retail section** are upgraded. The DID moves *"In Stock"* when the specified holding period is over.

Screenshot: "DID Management" settings

ⓘ While **viewing the DID settings** we strongly recommend to click the **"Cancel"** button.Therefore, the date changes aren't applied.

Statistics

Dashboard

We implemented **new charts** and adjusted parameters to provide data visualization. You could display a series of numeric data from the reports in a graphical format to easily understand large amounts of data and relationship between different series of data.

Hence, you can create charts and plot the data from the **Summary Reports, Orig-Term Reports** and **Active Calls** sections. Also, you can export already created charts to the **Dashboard**. And there is a possibility to **add new templates** to the Dashboard.

Moreover, you can **use the default templates**, copy and customize them according to your demands. To choose the default template: click the **"Show Chart"** button and select it from the drop-down list.

Read more about charts by clicking on a link to the article "How to create a statistic chart?" in our Knowledge Base.

Screenshot: Dashboard section
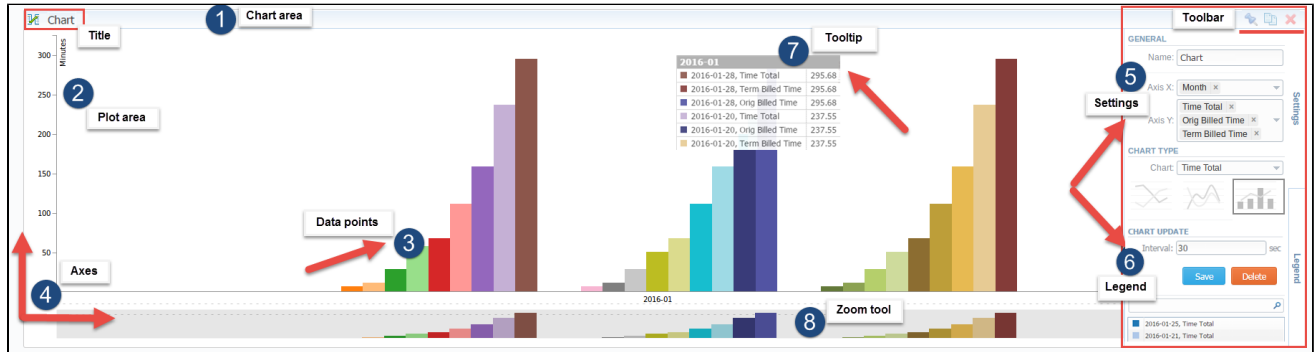
> ⓘ Please note, each *Reseller* and *Admin* have its own dashboards. If you logged in the system as *Reseller* the exisiting dashboards will be visible only for this *Reseller.*

Summary Report

As it has already mentioned, **the structure of reports is modified** to make your work with statistical reports much more painless. There is a **new form of queries**. It allows to easily run useful analysis reports with customizing search criteria, choose parameters that should be summarized, group data. Also, you can gather statistical data and display it as **visual charts.**

These sections have a new search form: **Summary report, Orig-Term Report, Balance Report, Profit Report, LCR's list, CDR's list, Calls Rerating, Reports Templates, Rates Analysis, Active Calls.**

Screenshot: Summary Reports section
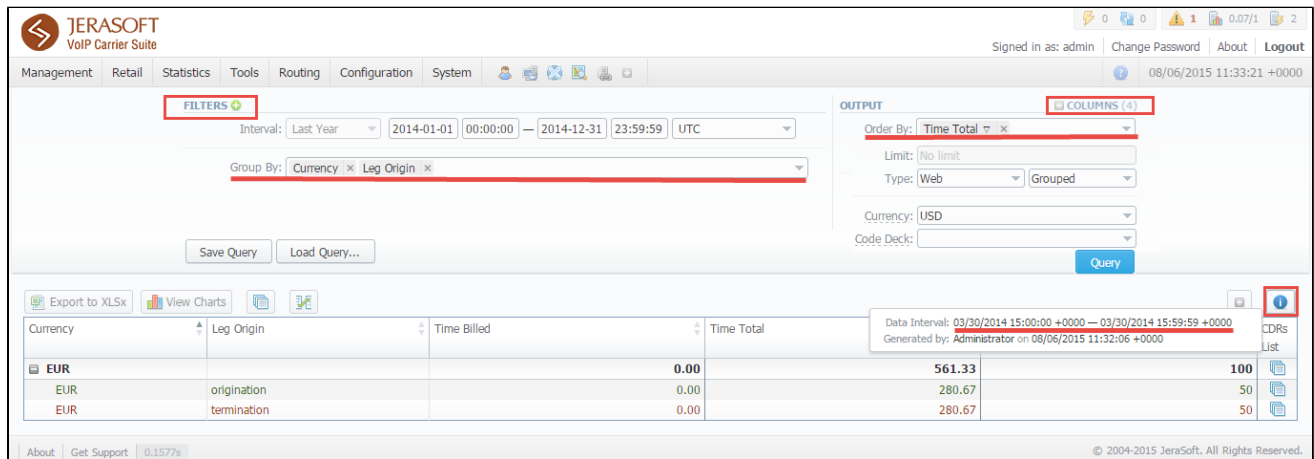
1. New search form has updates in the **settings to generate data**:

- Click the ➕ plus sign next to the *"Filters"* and **only select the filters that you need for the report**. You can cancel any filter by clicking the delete icon ✖.
- The **"Interval"** filter has additional options and you can generate the report for **last 3,7** and **30 days.**
- Now you can **group the data** using the **"Group By"** field, here you can select and swap columns.

⚠️ Please note, that if there is the **Client** or **CC serial** specified, it is not possible to group by default anymore.

2. There is a new special **Output form**, that is intended to simplify the way to output data:

- **Select columns** that should be present in the report using plus sign near **"Columns"** .
- Dynamically **sort already grouped data** using *"Order By"* from highest to lowest values (or vice versa) and select parameters.
- Specify the number of rows that will be visible in the report in the *"Limit"* field (only for plain type of the report).
- New format of the *"Type"* field: **Excel XLSx.**
- The option **"Send to"** * is in the *Summary Reports*, before it was available only in *CDRs list*.
- API parameter $order\_by$ is renamed to **orderBy.**

🛇 You can check an **actual date interval** of the report by clicking the **Info icon** 🛈 . And it could be different from *the Interval* specified above if there is no date for all periods.

3. From now on, you can create a **Reports Template**. To add a template, click **"Save Query"** on the toolbar. To find existing templates, point to the *Statistics* and open the *Reports Templates* section.

4. Use already existing template while generating a new report. All you need is to click **"Load Query"** on the *Summary Report* toolbar and choose a template.

5. A new **Reports Template** form is available for use.

6. The **"Watch"** option in the **Reports Template** form allows sending the generated reports to the list of e-mails.

Screenshot: Reports Templates form

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

🛈 Please note, the **system shows rounded values** in the reports. But while calculating the system takes an exact value.

Hence, the procedure of the rounding is following:

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

Also, the **"Limit"** option is accessible for the **Summary, Orig-term, Profit and Active Calls reports** in the system. You can find it in the output form of the reports and only for the plain type. It allows to determine the number of rows that will be visible in the report. It is useful for displaying some top positions by chosen parameter.

Orig-Term Report

The interface of this section is improved and the **new form of queries** allows to easily select filters, group data by several parameters and change the view of output data. The similar form is presented in the *Summary Report, CDRs* and *LCR lists*, etc.

Also, you can gather statistical data and display it as **visual charts.**

Screenshot: Orig-Term Report section

Profit Report

This section is modified respectively to the changes in reports mentioned above. To know more about a new query form and other interface improvements, look thought the article **"Profit Report"** in our *User Guide.*

CDRs and LCR Lists

The structure of *CDRs* and *LCR list* are updated and now it is similar to the **new form of queries** of the reports *(Summary Report, Orig-Term Reports, etc.).*

Also, the **API method stats_cdrs.edit** is modified and now it requires to add respective permissions for users to be able to run this method.

Mismatches Report

From now on, the **Excel XLSx, Excel XLS formats** are available in the output form of the *Mismatches Report section.*

Screenshot: Mismatches Report section

Calls Rerating

Due to the changes in reports, the structure of the **Call Rerating** is updated respectively. And it has a similar form for queries related to a new basic structure of reports *(Summary Report, Orig-Term Reports, etc.).* Please look through the **"Call Rerating"** article in our *User Guide* to get more details.
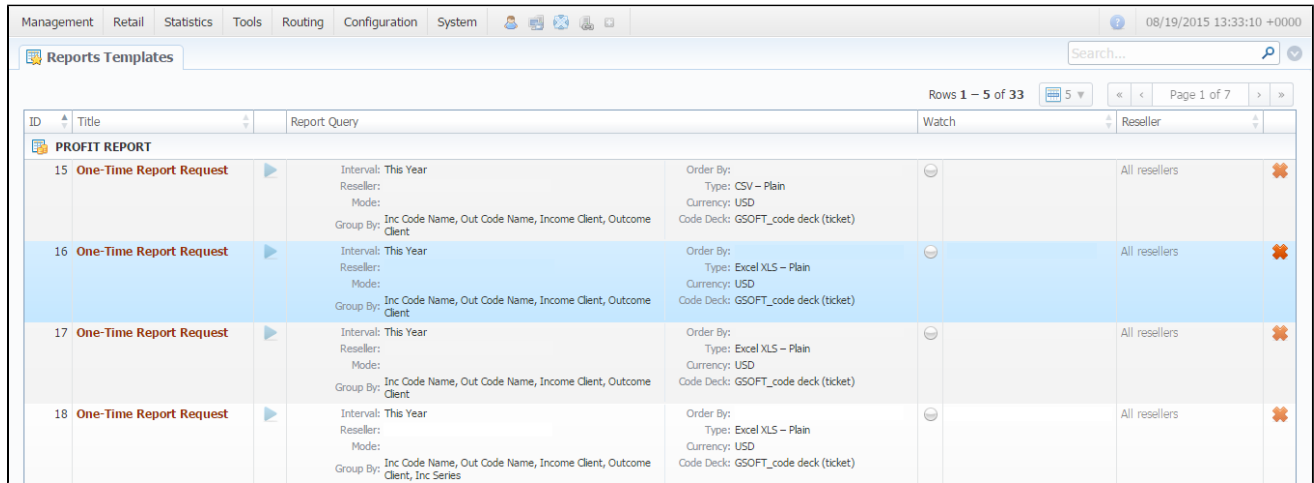
Also, in the current release we developed an algorithm to recalculate the calls by *Packages Limits* in the **Call Rerating.**

Reports Templates

This section is integrated instead of **Reports to E-mail** section and allows to work with templates in *Summary, Orig-Term, Profit reports, Active calls, Routing and Rate Analysis, LCR lists and CDR's list sections.*

There you can view a created report, edit and run it. You can run a report by clicking the play icon ▶ and open the settings. Also, you can send the report **via e-mail** to specified e-mail address by using a new option **"Watch"** that is available in the **Reports Templates** form.

Screenshot: Reports Templates section

> ✓ If you create a report template and the option *"Watch"* is enabled, the client will receive the file with report even when there are no statistics for a specified period.
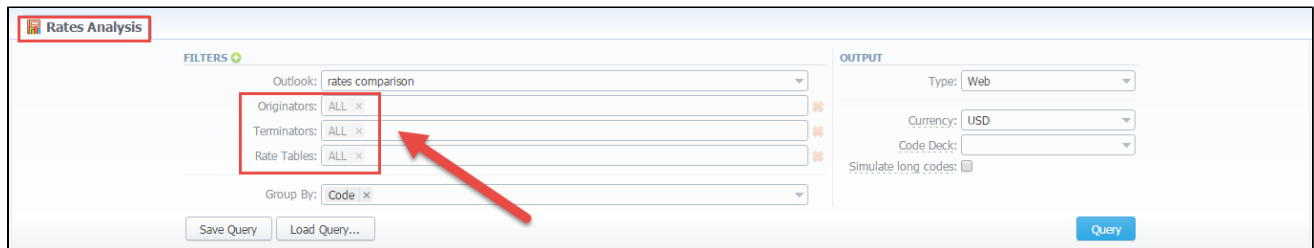
> ⊘ Please be aware, that the templates previously existing in the *"Reports to e-mail"* section could not be restored automatically. Note, that you can easily recreate them in the case of need.

Tools

Rates Analysis

The structure of *Rates Analysis* section is updated respectively due to the changes in reports. The rates could be analyzed and compared **with all rate tables, originators or terminators** using **Rates Analysis tool**. Therefore, you can **select all** values in the **Rates Analysis form** (see screenshot below).

Screenshot: Rates Analysis


Active Calls

The **Active Calls** section has a **new form of queries**. The similar form is presented in the *Summary Report, Orig-Term Reports,* etc. Also, you can gather statistical data and display it as **visual charts.**

Additional interval feature **"Show last"** appears in *Active Calls* section. It allows to specify for which time period the system displays active calls statistics. For example, if you want to display the data for 1 day, click the *"Reload options"* button and set the period *1440 min* in the *"Show last"* field.

Screenshot: Active Calls section
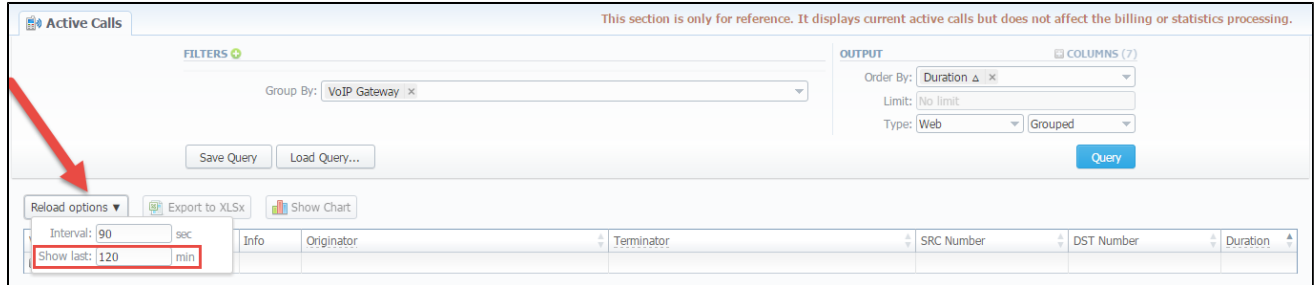
Factors Watcher

The **Factors Watcher** is upgraded and now it **blocks numbers with tech prefixes**. The full list of blocked numbers you can check in the *Blocked DST* tab .

Screenshot: Factors Watcher settings / Blocked DST

Also, there are few changes in the *Factors Watcher* section:

1. New possibility to add the **Reports Template** while creating a new factors watcher. Note, the system enables to set a limited number of parameters overridden from the assigned template.
2. You can set several clients for respective factors watcher (see screenshot below).

Screenshot: Factors Watcher settings

3. Now, there are **multiple parameters** for rules to add in *Factors Watcher* section. You can find the extended parameter list with specified measurement units in the *Factors Watcher* form. Also, it's possible to **add factors watcher rule with negative values**. For example, *cost_total* < -10.

Screenshot: Factors Watcher form

CDR Disputes

The **CDR Disputes** have developed optimization algorithms of the file uploading process. Hence, we strongly recommend uploading files with a limited number of columns. **The dispute file should contain only 6 columns** for correct auto-detection while importing.

Screenshot: CDR Disputes form / Import

Routing

Routing Plan

1. A new option **"Routing loop protection"** appears in the **Routing Plan.** It allows **to decline calls** from different accounts **of the same client**. It's enabled by default. To disable it tap the **"Routing loop protection"** check box (see screenshot below).

2. There is an enhancement of the **"Parent Routing Plans"** and you can select **several parent plans**.

3. Now, in the **"Vendor Limit"** box you can set the **limit only for accepted account routes**, not including the accounts blocked by the term groups.

Screenshot: Routing Plans form

Routing Analysis

Due to the changes in reports, the structure of the **Routing Analysis** is updated respectively. And it has a **new form of queries**, above-mentioned in this revision list. Please look through the **Routing Analysis** in our User Guide to get more details.

Configuration

urrencies

New configuration options allow to set the number of decimal places for each currency. The respective number of symbols will be displayed in all reports with cost and rate values in the statistics. Also, it will be shown in the invoices, except total values (totals always have 2 decimal places in invoices). While creating a new currency there are additional options for accurate monetary values formatting in the system:

- **"Rates precision"** - the number of decimal places for rates formatting.

- **"Details precision"** - the number of decimal places for detailed monetary values formatting. This precision is used for all reports except CDR report.

- **"Totals precision"** - the number of decimal places for total monetary values formatting.

Screenshot: New currency form

Payment Gateways

The **PayPal fee** functionality becomes fully automatic.The fee settings in *Payment Gateways PayPal section* are entirely removed, and now all calculations are made automatically.

> ⓘ   Please note that the charged amount includes the PayPal fees. For example, if customer pays 100.00 USD by credit card and the fee for each transaction is 3% of the full amount (3.00 USD), then customer's balance will be recharged for 97.00 USD.

New gateway parameter **"IP**" for QIWI validation is available in the Configurations section, Payment Gateways. You can specify several IP adresses separated by comma without spaces.

Screenshot: Payment Gateways settings

Groups

New feature **"VoIP Host Group"** is available in the *Configuration section - Groups.* It enables *VCS users* to group the statistics by respective host groups. Also, you can find the **"VoIP Host Group"** field in invoices *(Stats_table).*

Screenshot: VoIP Host Groups section

Invoices Templates

From now on, you can enter the special characters as & * ; + " % # or other symbols in the names of accounts, packages, invoices, VoIP groups or code names, etc. And the system will recognize and display them correctly **while generating invoices** or **using invoice templates.**

Screenshot: "Invoices Templates" settings

Now you can select the **Time format** *(H:M:S) or (M:S)* while creating a **new invoice template.** The default format is in minutes *(M)*.

Moreover, **some values were removed from invoices templates** settings by architectural considerations, namely:

- {package_time_f}, {time_f} in *Stats Table*;
- {time_f}, {billed_time_f} in *CDRs Table.*

The **method of calculating** and **rounding values** has been updated. Also, there are new features **"Totals Calculation"** and **"Taxes Calculation"** in the *Invoices Templates* that helps to avoid rounding issues with float numbers and missing cents.

Screenshot: Invoices Templates settings

Let's take a closer look at it:

✅ **Best practice example:**

If you have the next parameters:

- calls with the cost: $0.005 (the tax is $0.00105)
- package with activation fee: $ 7.1144 per month (the tax is $1.494024)
- package with activation fee: $ 5.1144 per month (the tax is $1.074024)
- package with activation fee: $ 3.1144 per month (the tax is $0.654024)
- tax 21%

And you select respective options:

Round then sum and Percent from the total amount	Sum then round and Sum of individual taxes
Then, it rounds specified above values in the invoice just like that: - calls - $0.01 - packages - $7.11, $5.11, $3.11 After it calculates the total amount ($0.01+$7.11+$5.11+$3.11) = $15.34. The total amounts are following: - amount without tax - **$15.34** - tax - $3.22 (15.34*0.21) - amount including tax - ($15.34+$3.22) =**$18.56**	It takes specified above *not rounded values* and calculates the total amount ($0.005+$7.1144+$5.1144+$3.1144) = $15.3482. After, it rounds a received sum ($15.3482) and the **total amounts are following:** - amount without tax - **$15.35** - tax - $3.22 (1.494024+1.074024+0.654024+0.00105) - amount including tax -($15.35+$3.22) = **$18.57**

Therefore, it's less than $0.01 cent from the total amounts. Totals may not match due to the selected option of the rounding method.

VoIP Gateways

A new collector **"Cisco 2811"** is accessible in the *"Collector Type"* field of the RADIUS Server. This one is based on collector "Cisco / Universal". The advantage of this version that it returns header *'h323-return-code=16'* in the case of successful authentication. Whereas the "Cisco / Universal" only returns header *'h323-return-code'* in the case of authentication failure.

Screenshot: "VoIP Gateways" settings

Settings

There is an enhancement of the **Backup Manager.** Therefore, an **archived statistics will not be uploaded by the Backup manager when you run it**. Now you can perform the backup faster thanks to the several improvements:

1. The new possibility to make a **backup of the database in multiple streams**.
   You can configure the number of threads in the *Configuration section Settings Backup Settings **Numbers of Backup Manager Workers*** (see screenshot below).

2. The advanced option **"Statistics archiving delay"**, that allows archiving **respective data in advance**.
   You can configure the number of days in the *Configuration section Settings Auto-Rotation and Cleaning **Statistics archiving delay*** (see screenshot below).

> ⊘ The recommended strategy is to configure this field and specify the days, do not leave 0 days as it's by default. Therefore, the system will archive the statistics automatically according to the specified period. And the next time the following backup will take less time because of the decreased volume of the not archived (active) statistics.

Screenshot: Configuration section/Settings

System

The re-rating modes are removed from *System section* and now the *Historic mode* (i.e. calls are processed based on the Client's state at the time of the call) is ON by default.