Traffic Processing

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Section overview

This section allows a user to configure and perform number translations. Here, you can add and remove rules for traffic processing. The section is presented in a form of a table of traffic processing rules with the following columns:

Screenshot: Traffic Processing section



Column Name	e Description		
ID	Rules identification number		
Туре	Type of a rule		
General	 Depending on rule parameters, a table can display the following scope of details: Name of service, the rule is created for Gateway, specified in a rule Tag(s), indicated in a rule 		
Client	Depending on rule parameters, a table can display the following scope of details: Client's name, specified in a rule Client's account, defined in a rule Indicated Code		
Prefixes	POSIX regular expression for Src number (Src Match) POSIX regular expression for Dst number (Dst Match) Src Prefixes (Src P Any/Src P Not) Src Prefixes Names (Src PN Any/Src PN Not) Dst Prefixes (Dst P Any/Dst P Not) Dst Prefixes Names (Dst PN Any/Dst PN Not)		
Action	Depending on rule parameters, a table can display the following scope of details: Replacement for a matched rule for Src number (Src) Replacement for a matched rule for Dst number (Dst) List of tags, added during traffic processing rule execution		
User	User name and time, when a rule was created/edited		
Order	Specified order for rule execution		

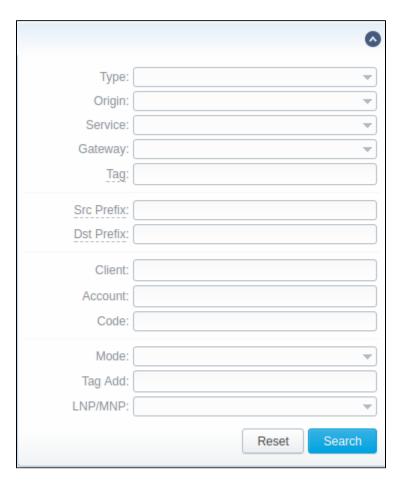
Functional **buttons/icons**, presented in the section, are as follows:

Button/Icon	Description	
4 Add Rule	Allows creating a new traffic processing rule	
Import	Allows importing a .csv file with a traffic processing rule(s)	
Export	Allows exporting a current list of rules in a .csv format	
•	Indicates that a rule origin is <i>origination</i>	
•	Indicates that a rule origin is <i>termination</i>	
•	Indicates the <i>Allow</i> action of a rule	
Indicates the <i>Allow and Continue</i> action of a rule		
	Indicates the <i>Deny</i> action of a rule	
\	Allows editing existing rules in a section list	
Allows deleting a traffic processing rule from the system		

Advanced Search

In the top right corner of the section above the table, an **Advanced Search** drop-down menu is located. By clicking on a blue downwards arrow cicon, a drop-down menu with the following structure is displayed:

Screenshot: Advanced Search drop-down menu

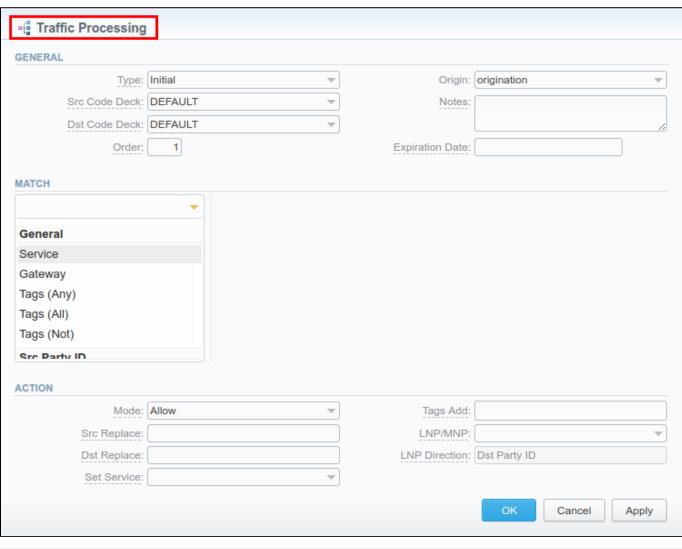


To apply the specified search criteria, click **Search**; to cancel the applied parameters, click **Reset**.

Creating a New Traffic Processing Rule

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

Screenshot: New Traffic Processing rule



Information block	Field	d Description			
General	Туре	Specifies, at what stage a current translation rule will be applied:			
		 Initial - execute this rule before a Client is identified After Client - execute this rule after client identification but before rate identification After Rate - execute this rule after rate identification but before routing After Routing - execute this rule after routing 			
	Scr Code Deck	Identify a code deck that will be used for Src codes or code names filtering			
	Dst Code Deck	Identify a code deck that will be used for Dst codes or code names filtering			

Order Sets rules ordering that works within the same rule Type. Attention Note that this field indicates the order of rules execution only within a specified type. It means that a rule with the *Initial* ty pe and order 1 will be executed before any other rule of the same type with order 2. However, such rule will be executed prior to a rule with the After Rate type and order 0, even though the latter has a higher order, due to the fact that Initial is the 1st on the types list. Origin Specify the event origin: • Origination Termination Specify additional informational about a rule Notes Define a date when this rule will expire and will be removed from the system Expira tion

Match

On the **Match** menu, select required parameters for a traffic processing rule. To cancel any filter, click on the delete # sign next to its name.

You can start a quick search by typing filters' names in the field at the top of the Match menu.



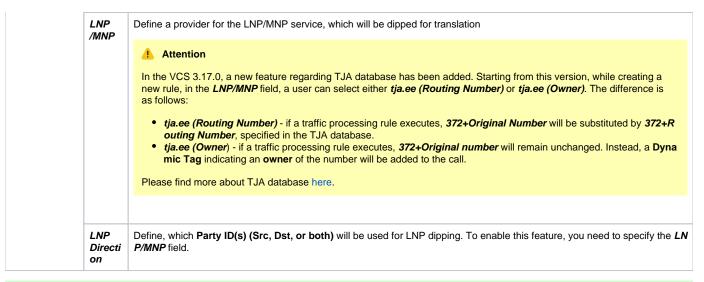
Date

If, for instance, the *Client* filter is empty, it means that this rule will implicate all clients.

General				
Service	Select a target from the drop-down list of all services, presented in the Services section of your VCS			
Gatew ay	Select a respective VoIP gateway, for which rule is applied, from the drop-down list			
Tags (Any)	A rule will work if event has at least one of the tags, specified in this field			
Tags (AII)	A rule will work if event has all tags, specified in this field			
Tags (Not)	A rule will work if event has no tags, specified in this field			
Scr Par	Scr Party ID			
Src (Match)	In this field, you may indicate POSIX regular expressions syntax, by which a number will be analyzed. If an expression matches the number, the translation will occur in respective settings in the <i>SRC Replace</i> field			
Src Prefix es (Any)	A rule will work if an event has at least one of the Src prefixes (e.g., 010, 810), specified in this field			
Src Prefix es (Not)	A rule will work if an event has no Src prefixes (e.g., 010, 810), specified in this field			
Src Prefix es Names (Any)	A rule will work if an event has at least one of the Src prefixes names (e.g., <i>vodafone</i>), specified in this field			

Src Prefix es Names (Not)	A rule will work if an event has no Src prefixes names (e.g., <i>vodafone</i>), specified in this field				
Dst Par	ty ID				
Dst (Match)	In this field, you may indicate POSIX regular expressions syntax (see best practice example below), by which a number will be analyzed. If an expression matches the number, the translation will occur in respective settings in the Dst Replace field				
Dst Prefix es (Any)	A rule will work if an event has at least one of the Dst prefixes (e.g., 010, 810), specified in this field				
Dst Prefix es (Not)	A rule will work if an event has no Dst prefixes (e.g., 010, 810), specified in this field				
Dst Prefix es Names (Any)	A rule will work if an event has at least one of the Dst prefixes names (e.g., <i>vodafone</i>), specified in this field				
Dst Prefix es Names (Not)	A rule will work if an event has no Dst prefixes names (e.g., <i>vodafone</i>), specified in this field				
Client					
Client					
Ciletit	Specify a respective client				
Olletti	Specify a respective client Attention				
Chem					
Accou	⚠ Attention				
Accou nt	Attention Please be advised that any traffic processing rule can have either the <i>Client</i> or <i>Account</i> field.				
Accou nt Code	Attention Please be advised that any traffic processing rule can have either the <i>Client</i> or <i>Account</i> field. Specify a respective account				
Accou nt Code Mode	Attention Please be advised that any traffic processing rule can have either the <i>Client</i> or <i>Account</i> field. Specify a respective account Specify a destination code (use * as a wildcard)				
Accou nt Code Mode	Attention Please be advised that any traffic processing rule can have either the <i>Client</i> or <i>Account</i> field. Specify a respective account Specify a destination code (use * as a wildcard) Defines an action that will be executed if a traffic rule matches: • Allow - allow a current event to proceed. Stop further traffic processing rules within this type of rule; • Allow and Continue - allow a current event to proceed. Search for the next traffic rule;				
Accou nt Code Mode Src Replace	Attention Please be advised that any traffic processing rule can have either the <i>Client</i> or <i>Account</i> field. Specify a respective account Specify a destination code (use * as a wildcard) Defines an action that will be executed if a traffic rule matches: • Allow - allow a current event to proceed. Stop further traffic processing rules within this type of rule; • Allow and Continue - allow a current event to proceed. Search for the next traffic rule; • Deny - deny a current event.				
Accou nt Code	Attention Please be advised that any traffic processing rule can have either the Client or Account field. Specify a respective account Specify a destination code (use * as a wildcard) Defines an action that will be executed if a traffic rule matches: • Allow - allow a current event to proceed. Stop further traffic processing rules within this type of rule; • Allow and Continue - allow a current event to proceed. Search for the next traffic rule; • Deny - deny a current event. Replacement for a matched rule. For this field to work, the Scr Match filter must be used in the Match information block.				

Action



Best Practice Example

To get a better understanding of how the Src/Dst Match and Src/Dst Replace fields work, let's consider the following example:

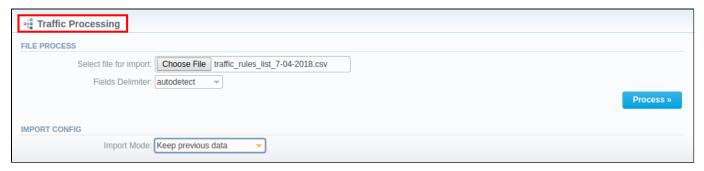
If our Src/Dst number is 123#456, the Src/Dst Match field is ^123#(.*)\$ and the Src/Dst Replace field is 789\1, the resulting number will be 789456. That's because the ^123#(.*)\$ expression tells the system that from 123#456 number it must remember only the (.*) part, which stands for 456. Now, in the Src/Dst Replace field we have 789\1, which means that instead of 123#456, it must insert 789 + add \1 that equals (.*). Therefore, our resulting number will be 789+456=789456. These translation rules use the PostgreSQL regular expressions syntax (based on POSIX regex with some extensions). For more information, please refer to the PostgreSQL documentation portal.

In addition, in the *Src/Dst Replace* field you can insert random number with fixed digit length using the **\$rnd(xxx-yyy)\$** variable, where **xxx** - start number and **yyy** - end number of the range. For example, **\$rnd(050-950)\$** will be replaced by a **3-digit random number from 50 to 950**.

Rules Import

Now, a user can import a .csv file containing a list of traffic processing rules. To do so, click the **Import** button and a pop-up window with the following structure will appear:

Screenshot: Traffic processing rule import



Information block	Field	Description
File Process	Select a file for import	Select a .csv file to import a traffic processing rule from
	Fields Delimiter	Specify a delimiter symbol here. The possible options are:
		 Autodetect , ; Tab By default, the Autodetect option is selected.

Import Config	Import Mode	Specify what to do with the current traffic processing rules:
		 Keep previous data - new rules will be added to the old ones Purge all other rules - old rules will be deleted and substituted by the new ones.
		By default, the Purge all other rules option is selected.

When all fields are filled in, click **Process>>**. You will be transferred to the second step to indicate the default values in respective fields and specify rows and columns. To finish importing, click **Process>>** again.

Rules Export

By clicking on the **Export** button, you can download a current list of rules in a .csv file.

Screenshot: Rules export

