# **Factors Watcher**

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### **Factors Watcher List**

This section represents a built-in tool to monitor statistics and generate alerts, as well as block numbers, codes/code names, destinations, clients, or accounts if some conditions are met. The section is presented in the form of a table with the following columns:

Screenshot: Factors Watcher main section

	Lactors Watcher									
C	🕒 New Factors Watcher 🗰 20 💌 🤟 « 🤟 Page 1 of 1 🔅 »									
ID	V 🗍 Name 🕌 Watch Rules			iles 🍦	Traffic Rules 🝦 Query					
	1	Watcher 1 Analyze by: Summary Report Check time: 30 minute(s) / 30 minute(s) No check has been made yet		1 🛝	0	۰ł	Client: <b>{"Rose orig"}</b> Code Name: – Group By: <b>Code Name, Gateway</b>	Company: <b>Reseller 1</b> Code: – Gateway: –	<b>N</b>	*
Ab	About Get Support 0.3308s © 2004-2018 JeraSoft. All Rights Reserved.									

Column	Description
	-
ID	Identification number of factors watcher
Name	Name of a factors watcher
Watch Rule	Total number of watch rules within a factors watcher
Presets	Total amount of traffic rules, created by a factors watcher
Query	Factors watcher query

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

lcon	Description			
	Allows editing existing watch rules			
=ŧ	Allows viewing traffic rules, created by a factors watcher			
<b>S</b>	Allows editing a factors watcher			
*	Allows deleting a factors watcher			

#### Creating a New Factors Watcher

The tool is based on periodical queries in the Summary or xDRs List sections. To create a new query, click the New Factors Watcher button and specify parameters in the following form:

Screenshot: Adding a New Factors Watcher

Na	me:			Analyze	interval of:	30 minute(s)	
Analyze	by: Summary Report		-	Ch	neck every:	30 minute(s)	
				Comp	oare Mode:	•	
EFILL QUERY				Pe	eriod Start:		
Report Templa	ate:		<b></b>	1	Time Zone: UTC		
JERY		Account:					
JERY Client:		Account: Dst Code:					
JERY Client: Dst Code Name: Company: all	resellers	Account: Dst Code: Code Deck:	Pre-assigned decks		Gateway: [		

Field	Description
Name	Factors watcher's name. This field is mandatory. The name must be no longer than 128 symbols.
Analyze by	Select a report (Summary or xDRs List), a new factors watcher will be based on
	Different reports provide a different set of parameters that are available for monitoring. For instance, <b>xDRs List</b> allows you to work with service sources (phone numbers, data) while <b>Summary report</b> allows such operations with ACD and ASR.
Report Template	Specify the template for further usage (optional)
rempiate	Attention Please note that the system enables to set a limited number of parameters overridden from the assigned template. For example: If there are 2 or more clients assigned to the respective template, the system will use the first client for Factors Watcher settings, all others will be ignored.
Analyze Interval of, min	Interval of time to check. Please note, this option checks a current period, not the past hour.
Check Every, min	Frequency of checks, performed by a factors watcher
Compare Mode	This period is used to compare the results of different intervals. It deducts a specified period from the <i>Period Start</i> date, then takes the statistics according to the <i>Analyse interval of</i> value and the date calculated above. The options here are:  • <i>Previous Period</i> • <i>Previous Day</i> • <i>Previous Week</i> • <i>Previous Month</i> • <i>Previous Year</i>
Period Start	Enter the specific time to set a factors watcher starting date
Timezone	Specify a timezone that will be used for reports queries/blocking routes
Query information block	Indicate the query fields that will be used for generating a selected type of report

Client	Select a client. You can specify multiple clients.						
	Attention						
	If you specify a client(s), the <i>Account</i> field becomes unavailable and vice versa.						
Account	Select a target client's account						
Code Name	Indicate a code name						
	1 Attention						
	The Code and Code Name fields are mutually exclusive						
Code	Define the code						
Company	Specify a Reseller						
Code Deck	Indicate a target code deck						
Gateway	Select a respective gateway						
Group by #	Group query by a selected parameter ( <i>client, account, code name, code</i> or <i>gateway</i> ). Pay attention that based on selected parameters, respective <i>Action</i> options will be available. For instance, if you group by <i>Code</i> , in the rule settings you will have the <i>Block Code</i> option and so on.						
Test Query bu tton	Click on this button to perform a test query in the Summary or xDRs List Report for the period, specified in the <b>Check Every</b> and <b>Analy ze Interval of</b> fields						

When you click **OK**, the new factors watcher will be created. You can edit the properties of this watcher later by clicking the edit 💊 icon.

## **Configuring Watch Rules**

Next, you need to configure the watcher rules - parameters, under which conditions are monitored. To do this:

- 1. choose the already existed Factors Watcher from the list or create a new rule;
- click on the name of the Factors Watcher or the watch rule icon;
   in the appeared window, click the Add Rule button and fill in the following fields:

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La Factors Watcher 1 Watcher 1												
🔂 Add ri	ule										Rows 1 -	0 of 1
Priority	Match				Factors	Action	Lock	Periodic	Expiration Date			
	Service	Origin	Gateway	Account	Code			Period	lock			
0	Calls 👻	origination 👻	GW Calls			acd_cur < 80	Alert 👻	0 min				*
Match — yo Factors — y - volume_toi - records_to - cost_total, - asr_std, as	uu can use *** wildca you should list watc tal, volume_billed, a tal, records_notzer rate_avg - with measur r_cur - with measur	ard in these fields. h rules in this field c ccd_std, acd_cur, pc , records_success, asurement unit: mor rement unit: percent	delimited by ";" List Id, scd, package_ records_busy, rec rey; tage (%).	of correct fields: rolume - with meas ords_nochannel, r	surement unit speci ecords_error - with	fied in service measurement unit: numbers;				ОК Салсе	el Aj	oply
Field	Descrip	tion										

	•	-					
Priority	Define a priority of rules execution if they have a similar <i>Match</i> parameter						
Match	h A set of parameters that are used as a basis for checks						
	Service Determine the type of service (e.g., <i>calls, SMSs, data</i> )						

	Origin	Type of route to check ( <i>Origination/Termination</i> )							
	Code Name	Indicate the code name to apply a rule to							
	Gateways	Specify the gateway to apply a rule to							
	Tip To create a temporary rule priority and specify an appr each other and the rule with	that will override other rules with the same match parameters, you need to set up the rule with the highest opriate <b>Expiration Date</b> . Therefore, the existed multiple rules with the same match parameters will override h the highest priority will be applied.							
Factors	Enter factors that will be ap	oplied to a current rule.							
	Parameters must be listed with a <b>semi-colon ";" as a delimiting symbol.</b>								
	The list of parameters available for usage:								
	<ul> <li>volume_total, volume_billed, acd_std, acd_cur, pdd, scd, package_volume - with a measurement unit specified in the service</li> <li>records_total, records_notzero, records_success, records_busy, records_nochannel, records_error - with a measurement unit numbers;</li> <li>cost_total, rate_avg - with a measurement unit: money;</li> <li>asr_std, asr_cur - with a measurement unit: percentage (%).</li> </ul>								
	For example, if you enter <b>tot</b> parameters goes over 100 (h	al_volume > 100, it means that when the total event volume (e.g., call time) count for respective match nere - minutes), the system will create an alert.							
	It's possible to add a factors	watcher rule with negative values. For example, <i>total_cost &lt; -10</i> .							
	Factors with a reference to	the side-by-side reports:							
	You can adjust these factors first period; <i>factors_name_2</i>	on your own, using the next formula and pre-existing factors mentioned above: <i>factors_name_1</i> - value for the ? - value for the second period; <i>factors_name_diff</i> - the difference between periods.							
	For example: total_cost_1 (of the 1 <sup>st</sup> period), total_cost_2 (of the 2 <sup>nd</sup> period), total_cost_diff (difference in %).								
	<ul> <li>Tip</li> <li>Users can add the Factors Watcher based on the side-by-side Summary Report. All you need to do is:         <ul> <li>click the New Factors Watcher button;</li> <li>fill in the Name field and others according to your needs;</li> <li>specify intervals in the next fields: Analyze Interval of, Period Start and Period Offset,</li> <li>click the Test Query button.</li> </ul> </li> </ul>								
Action	An action that must be taken	if a matched rule is found.							
	There are respective options When one of these options is	: Alert, Block Code Name/Account/Client s applied, the message will be shown in the Events log section.							
	Attention								
	The Block Code Name/Cl. the Client, the Block Acco	<i>ient/Account</i> options will be invisible if the <i>Group By #</i> field in factors watcher rule is empty. If you group by bunt option won't be visible in the drop-down list of the <i>Action</i> field.							
Lock Period	Defines the lockout time in m	inutes for the analyzed route in case of a block action (0 value means infinite lockout)							
Period ic Lock	If enabled, the rule will expire option has a higher priority th	e at the end of a period specified in the <b>Analyze interval of</b> field in the Watcher settings. Please note, that this nan the <b>Expiration Date</b> .							
Expira tion Date	Specify the date when the ru	le must be automatically deleted							

#### **Attention**

Please note that the set of rules in the Action field depends on how many parameters you defined in the Group by # field when a current query was created.

The **Block Code** option is available only if you set respective grouping in the factors watcher settings. For example, if you defined code in the query, you will be able to block codes in watcher rules, etc.