

Event catcher.

Setup guide for package OTRS-Billing 1.0.1b_en.

Review.

Catcher are designed to detect changes telephone traffic and notification of recipients about events via e-mail messages.

Traps have the following functions event detection:

- Detection of exceeding the threshold costs value of traffic
- Detection of calls matching pattern of number-A
- Detection of calls matching pattern of number-B
- Detection threshold exceeding of calls number in a polling interval

The traps can be combined to these functions. Several conditions are combined conjunction (logical "AND").

Traps have the following algorithm:

Processed traffic for the last polling interval to match the condition of traps (greater than or equal to).

Polling period may be of two types:

- Accumulate data
- In the interval of the polling period

The figure shows the types of polls:

Accumulate data:

Start table

Polling interval	+						
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In the interval of the polling period:

Start table

			Polling interval
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"Events catcher" are on the Billing: Extended module.

The screenshot shows the OTRS web interface. At the top, there is a navigation bar with tabs for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, TELEPHONY (highlighted), and ADMIN. Below the navigation bar, there is a section for 'Extended CDR' with an 'Actions' table. The 'List of extended' table contains the following data:

ID	TITLE	COMMENT
	recost	recost period
	error identification	unidentified calls
	upload CDR-log	CDR-import from file
	CDR source	view CDR source
	events_catcher	send event notification
	PBX-monitor	control CDR-data receiving

In the menu of the module the set traps are displayed. Traps only with the status the valid are processed.

The screenshot shows the 'Events catch' table in the OTRS interface. The table has columns for ID, TITLE, COMMENT, PERIOD, CREATED, STATUS, and DELETE. There are two entries in the table:

ID	TITLE	COMMENT	PERIOD	CREATED	STATUS	DELETE
	fraud-risk areas	fraud-risk areas	10	2015-03-01 16:18:08	valid	
	exceeded the threshold value of traffic costs	cumulative total traffic	+5	2015-03-01 16:18:08	valid	

For editing click a trap ID icon.

Field Assignment:

- Title: name of a trap
- Message: a subject which will be inserted into the email of an event
- Number-A: the list call numbers, which will be found, * means any subsequent digits
- Number-B: the list call numbers, which will be found, * means any subsequent digits
- CO-line: the lines that will be applied to the trap. If there is no line - will be processed all the lines.
- Client: Clients, which will apply a trap. If there is no client – all clients will be processed.
- Traffic: direction of calls (incoming / outgoing).
- Accumulate data – means that all traffic for the current table will be add up.
- Polling interval: the table will be polled through this period and for this period (a traffic segment for an polling interval if flag "Accumulate data" isn't set).
- PBX: to select one or all of the PBX.
- Operator: to select one or all of the operators.
- Threshold cost: a traffic cost threshold for sending the notification message. 0.000 value disables processing of cost.
- Threshold calls: threshold for the number of calls for notification. The "0" disables processing calls.
- Threshold duration: threshold for the duration of calls for notification. The "0" disables threshold of duration.
- e-mail from: sender of the notification message.
- Recipient e-mail: e-mail notification recipient.
- Comment: Comment traps.

Field: The polling interval has extension "from the last record".

In case of flag activation for this option, start time of polling will be taken from the last call record in the table of the polled PBX.

This option can be used when time on PBX isn't synchronized. For the rest, traps are used without this option.

For a network of distributed PBX located in different time zones, shift correction is formed.

The shift is formed from the time zone setting on the PBX tab: CDR source.

Example trap: fraud-risk areas

Edit events catch

ID: 1

Status:

Title:

Message:

Number-A:

Number-B:

NUMBER-B	DELETE
0023221*	<input type="button" value="🗑"/>
002247*	<input type="button" value="🗑"/>
00252*	<input type="button" value="🗑"/>
0037744*	<input type="button" value="🗑"/>
00534*	<input type="button" value="🗑"/>
008818*	<input type="button" value="🗑"/>
008819*	<input type="button" value="🗑"/>
008821*	<input type="button" value="🗑"/>
008823*	<input type="button" value="🗑"/>
009607*	<input type="button" value="🗑"/>
0087*	<input type="button" value="🗑"/>

CO-Lines:

Customer:

Traffic: Any Incoming Outgoing

Accumulate data

Polling interval, min: From last record

PBX:

Operator:

Cost threshold:

Calls threshold:

Threshold min duration:

e-mail from:

Recipient e-mail:

Comment:

or [Back](#)

This trap monitors every 10 minutes in the 10-minute interval the appearance of at least 2 calls to specified numbers-B. When the event occurs - sends e-mail message to the address: admin@ip-lab.ru

Configuring SMTP.

The module is designed for use protocol SMTP.

Correct if it is necessary, settings of mail services:

On the Admin tab click the link: " SysConfig", specify Framework. Click the link "Core::Sendmail"

SysConfig

Actions

Search

Navigate by searching in 1273 settings

Framework (381) ▾

Navigate by selecting config groups

 **Export settings**

 **Import settings**

Result

SUBGROUP	ELEMENTS	GROUP
Core	28	Framework
Core::LinkObject	4	Framework
Core::Log	6	Framework
Core::MIME-Viewer	4	Framework
Core::MirrorDB	3	Framework
Core::PDF	12	Framework
Core::Package	6	Framework
Core::PerformanceLog	3	Framework
Core::SOAP	2	Framework
Core::Sendmail	9	Framework
Core::Session	16	Framework
Core::SpellChecker	4	Framework
Core::Stats	3	Framework

Specify the type of SendmailModule – SMTP.

Specify in the field of SendmailModule::Host where specify the address of your SMTP-server.

If the SMTP port differs from TCP25, specify the port in the SendmailModule::Port, check the box and enter the port number.

If you are using to send mail with authorization - specify in the fields SendmailModule::AuthUser and SendmailModule::AuthPassword.

Note: Events catcher module does not use SSL (unencrypted).

Example:

Edit Config Settings in Framework -> Core::Sendmail

<input checked="" type="checkbox"/>  SendmailModule	<input type="text" value="SMTP"/>
Defines the module to send emails. "Sendmail" directly uses the sendmail binary of your operating system. Any of the "SMTP" mechanisms use a specified (external) mailserver. "DoNotSendEmail" doesn't send emails and it is useful for test systems.	Default value: Sendmail
<input checked="" type="checkbox"/> SendmailModule::CMD	<input type="text" value="/usr/sbin/sendmail -i -f"/>
If "Sendmail" was selected as SendmailModule, the location of the sendmail binary and the needed options must be specified.	Default value: /usr/sbin/sendmail -i -f
<input checked="" type="checkbox"/>  SendmailModule::Host	<input type="text" value="mail.ip-lab.ru"/>
If any of the "SMTP" mechanisms was selected as SendmailModule, the mailhost that sends out the mails must be specified.	Default value: mail.example.com
<input checked="" type="checkbox"/>  SendmailModule::Port	<input type="text" value="25"/>
If any of the "SMTP" mechanisms was selected as SendmailModule, the port where your mailserver is listening for incoming connections must be specified.	Default value: 25
<input checked="" type="checkbox"/> SendmailModule::AuthUser	<input type="text" value="info@ip-lab.ru"/>
If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, an username must be specified.	Default value: MailserverLogin
<input checked="" type="checkbox"/> SendmailModule::AuthPassword	<input type="text" value="..."/>
If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, a password must be specified.	Default value: MailserverPassword
<input type="checkbox"/>  SendmailBcc	<input type="text"/>
Sends all outgoing email via bcc to the specified address. Please use this only for backup reasons.	Default value:
<input checked="" type="checkbox"/> SendmailNotificationEnvelopeFrom	<input type="text" value="info@ip-lab.ru"/>
If set, this address is used as envelope from header in outgoing notifications. If no address is specified, the envelope from header is empty.	Default value:

Confirm the change by pressing the button:

Update

Go to setup of the sender:

On the Admin tab click the link: Email Addresses:

Email Settings

PostMaster Mail Accounts Manage POP3 or IMAP accounts to fetch email from.	PostMaster Filters Filter incoming emails.
Email Addresses Set sender email addresses for this system.	S/MIME Certificates Manage S/MIME certificates for email encryption.
PGP Keys Manage PGP keys for email encryption.	

Click the "Add system Address":

System Email Addresses Management

Actions	List
+ Add system address	EMAIL ADDRESS otrs@localhost

Specify the field:

Add System Email Address

* Email address:

* Display name:
The display name and email address will be shown on mail you send.

* Queue:

* Valid:

Comment:

or

Apply by clicking the "Submit" button.

In the list there will be the new address::

System Email Addresses Management

Actions	List												
+ Add system address	<table><thead><tr><th>EMAIL ADDRESS</th><th>DISPLAY NAME</th><th>COMMENT</th><th>VALID</th></tr></thead><tbody><tr><td>otrs@localhost.net</td><td>OTRS System</td><td>Standard Address.</td><td>invalid</td></tr><tr><td>info@jp-lab.ru</td><td>information message</td><td>Sender notifications</td><td>valid</td></tr></tbody></table>	EMAIL ADDRESS	DISPLAY NAME	COMMENT	VALID	otrs@localhost.net	OTRS System	Standard Address.	invalid	info@jp-lab.ru	information message	Sender notifications	valid
EMAIL ADDRESS	DISPLAY NAME	COMMENT	VALID										
otrs@localhost.net	OTRS System	Standard Address.	invalid										
info@jp-lab.ru	information message	Sender notifications	valid										

This address will be available in the settings of the Events catcher module in the sender field..

Starting and stopping the Events catcher module.

The module Events catcher stops and started together with : on the "CDR Manage" state collector should be: "Collecting running".



The control module state occurs in CRON every minute.

Diagnostics.

File ID-process catcher.txt traps located in the \installation path\OTRS\OTRS\ cdrsrc. This file is updated every minute. In the directory \installation path\OTRS\OTRS\cdrsrc\log, in case of errors, error logs will appear traps: catcher_dberror_YYYYMM.txt, catcher_smtp_error_YYYYMM.txt, catcher_wrong_id_YYYYMM.txt.

Recipient.

The recipient can be specified mailbox that will receive event notifications.

For example, the message traffic in the direction of fraud:

The screenshot shows the 'The Bat!' email client interface. The main window displays an email message with the following details:

- From:** <info@ip-lab.ru>
- To:** admin@ip-lab.ru
- Subject:** Discovered traffic to risk destinations ID: 1

The message body contains the following text:

```
Exceeded the threshold counter calls: 2.  
Detected calls for the period: 5  
Calls:  
-----  
Customer      Number-A      Number-B      Date      Time      Dur.min.      PBX      Destination      Cost      Cur.  
-----  
Office-1      1018      0025299*****  14-05-15      11:08:15      30      osb_x8      Somalia Dem. Rep.      24.000      EUR  
Office-1      1018      0025299*****  14-05-15      11:08:15      34      osb_x8      Somalia Dem. Rep.      27.200      EUR  
Office-1      1017      00881635*****  14-05-15      11:08:18      27      osb_x8      Global Mobile Satellite System      405.000      EUR  
Office-1      1017      0088233*****  14-05-15      11:08:19      24      osb_x8      Int. networks      360.000      EUR  
Office-1      1017      009607*****  14-05-15      11:08:16      36      osb_x8      Maldives      26.600      EUR  
-----  
OTRS-Billing event message  
-----
```

The recipient may also be OTRS. In this case, each agent will receive notifications for selected queue. As example:

The screenshot shows the OTRS Dashboard interface. At the top, there is a navigation menu with 'DASHBOARD', 'TICKETS', 'STATISTICS', 'CUSTOMERS', 'TELEPHONY', and 'ADMIN'. The 'DASHBOARD' tab is selected. Below the navigation, there are several sections: 'Reminder Tickets', 'Escalated Tickets', 'New Tickets', and 'Open Tickets / Need to be answered'. Each section shows 'Locked Tickets (0)' and 'All (0)'. The 'New Tickets' section contains a table with two rows of ticket data. To the right, there is a '7 Day Stats' graph showing a sharp increase in activity on Thursday. The footer indicates 'Powered by OTRS 3.0.22' and 'Top of page'.

Setup notifications of agents You can perform on the documentation available on the resource OTRS. The recipient setting is done on the "Admin -> PostMaster Mail Accounts", which specifies the e-mail, from which to retrieve mail.

The screenshot shows the 'Add Mail Account' form in the OTRS Admin interface. The 'ADMIN' tab is selected in the navigation menu. The form includes fields for:

- * Type: POP3
- * Username: info
- * Password: [masked]
- * Host: mail.ip-lab.ru
- Trusted: No
- Dispatching: Dispatching by selected Queue. (highlighted with a red box)
- Queue: Misc
- * Valid: valid
- Comment: Event Notification

 There are 'Submit' and 'Cancel' buttons at the bottom of the form. On the left side, there is an 'Actions' section with a 'Go to overview' button and a 'Hint' section with instructions about email dispatching.

You must specify this e-mail recipient on filed "Recipient e-mail" Event Catcher form.

The screenshot shows the 'Recipient e-mail' Event Catcher form. It includes the following fields:

- e-mail from: info@ip-lab.ru
- Recipient e-mail: info@ip-lab.ru (highlighted with a red box)
- Comment: fraud-risk areas

 At the bottom, there are 'Apply' and 'Back' buttons.

In the setting of the agent install, "Admin -> Agents create and manage agents":

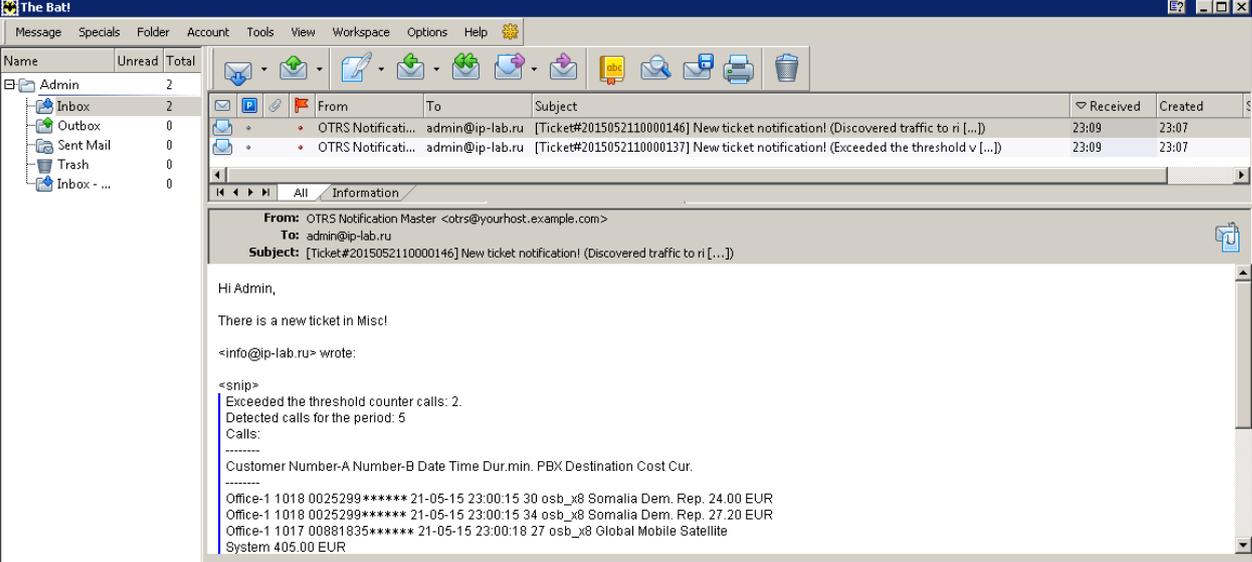
Edit Agent

Title:	<input type="text" value="Admin CDR"/>
* Firstname:	<input type="text" value="Admin"/>
* Lastname:	<input type="text" value="CDR"/>
* Username:	<input type="text" value="admin"/>
Password:	<input type="password"/>
* Email:	<input type="text" value="admin@ip-lab.ru"/>
Valid:	<input type="text" value="valid"/>
Language:	<input type="text" value="English (United States)"/>
Frontend language	
Skin:	<input type="text" value="Default"/>
Wear this frontend skin	
Theme:	<input type="text" value="Standard"/>
Frontend theme	
Out Of Office Time:	<input type="radio"/> On <input checked="" type="radio"/> Off
Start:	<input type="text" value="05"/> / <input type="text" value="14"/> / <input type="text" value="2015"/> 
End:	<input type="text" value="05"/> / <input type="text" value="15"/> / <input type="text" value="2015"/> 
New ticket notification:	<input type="text" value="Yes"/>
Send new ticket notifications	
Ticket follow up notification:	<input type="text" value="No"/>
Send ticket follow up notifications	
Ticket lock timeout notification:	<input type="text" value="No"/>
Send ticket lock timeout notifications	
Ticket move notification:	<input type="text" value="No"/>
Send ticket move notifications	
My Queues:	<input type="text" value="Junk"/> <input type="text" value="Misc"/> <input type="text" value="Postmaster"/> <input type="text" value="Raw"/>

Select an agent queues.

The agent will receive notices with these queues on e-mail specified in the field of Email of this form.

Agent e-mail notifications:



The screenshot shows the 'The Bat!' email client interface. The left sidebar displays a folder tree with 'Admin' (2 unread), 'Inbox' (2), 'Outbox' (0), 'Sent Mail' (0), 'Trash' (0), and 'Inbox - ...' (0). The main window shows a list of two OTRS notification emails from 'admin@ip-lab.ru'. The selected email has the subject '[Ticket#2015052110000146] New ticket notification! (Discovered traffic to ri [...])' and was received at 23:09 and created at 23:07. The email body contains the following text:

From: OTRS Notification Master <otrs@yourhost.example.com>
To: admin@ip-lab.ru
Subject: [Ticket#2015052110000146] New ticket notification! (Discovered traffic to ri [...])

Hi Admin,

There is a new ticket in Misc!

<info@ip-lab.ru> wrote:

<snip>
Exceeded the threshold counter calls: 2.
Detected calls for the period: 5
Calls:

Customer Number-A Number-B Date Time Dur.min. PBX Destination Cost Cur.

Office-1 1018 0025299***** 21-05-15 23:00:15 30 osb_x8 Somalia Dem. Rep. 24.00 EUR
Office-1 1018 0025299***** 21-05-15 23:00:15 34 osb_x8 Somalia Dem. Rep. 27.20 EUR
Office-1 1017 00881835***** 21-05-15 23:00:18 27 osb_x8 Global Mobile Satellite
System 405.00 EUR