



## Zabbix Documentation 3.0

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## 5 Receiving problem notification

### Overview

In this section you will learn how to set up alerting in the form of notifications in Zabbix.

With items collecting data and triggers designed to “fire” upon problem situations, it would also be useful to have some alerting mechanism in place that would notify us about important events even when we are not directly looking at Zabbix frontend.

This is what notifications do. E-mail being the most popular delivery method for problem notifications, we will learn how to set up an e-mail notification.

### E-mail settings

Initially there are several predefined notification delivery methods in Zabbix. E-mail is one of those.

To configure e-mail settings, go to *Administration* → *Media types* and click on *Email* in the list of pre-defined media types.

Media types					Create media type
<input type="checkbox"/>	NAME ▲	TYPE	STATUS	USED IN ACTIONS	DETAILS
<input type="checkbox"/>	Email	Email	Enabled		SMTP server: "mail.company.com", SMTP helo: "company.com", SMTP email: "zabbix@company.com"
<input type="checkbox"/>	Jabber	Jabber	Enabled		Jabber identifier: "jabber@company.com"
<input type="checkbox"/>	SMS	SMS	Enabled		GSM modem: "/dev/ttyS0"

This will present us with the e-mail settings definition form.

## Media types

Name	<input type="text" value="Email"/>
Type	<input type="text" value="Email"/>
SMTP server	<input type="text" value="mail.company.com"/>
SMTP server port	<input type="text" value="25"/>
SMTP helo	<input type="text" value="company.com"/>
SMTP email	<input type="text" value="zabbix@company.com"/>
Connection security	<input type="radio"/> None <input checked="" type="radio"/> STARTTLS <input type="radio"/> SSL/TLS
Authentication	<input type="radio"/> None <input checked="" type="radio"/> Normal password
Enabled	<input checked="" type="checkbox"/>
<input type="button" value="Update"/> <input type="button" value="Clone"/> <input type="button" value="Delete"/> <input type="button" value="Cancel"/>	

Set the values of SMTP server, SMTP helo and SMTP e-mail to the appropriate for your environment.

'SMTP email' will be used as the 'From' address for the notifications sent from Zabbix.

Press *Update* when ready.

Now you have configured 'Email' as a working media type. A media type must be linked to users by defining specific delivery addresses (like we did when configuring a new user), otherwise it will not be used.

### New action

Delivering notifications is one of the things actions do in Zabbix. Therefore, to set up a notification, go to *Configuration* → *Actions* and click on *Create action*.

Action	Conditions	Operations
<div>Name <input type="text" value="Test action"/></div> <div>Default subject <input data-bbox="418 262 1010 308" type="text" value="{TRIGGER.STATUS}: {TRIGGER.NAME}"/></div> <div>Default message <div><div>Trigger: {TRIGGER.NAME} Trigger status: {TRIGGER.STATUS} Trigger severity: {TRIGGER.SEVERITY} Trigger URL: {TRIGGER.URL}</div><div>Item values: 1. {ITEM.NAME1} ({HOST.NAME1}:{ITEM.KEY1}):</div></div></div> <div>Recovery message <input type="checkbox"/></div> <div>Enabled <input checked="" type="checkbox"/></div> <div><div>Add</div><div>Cancel</div></div>		

In this form, enter a name for the action.

{TRIGGER.STATUS} and {TRIGGER.NAME} macros (or variables), visible in the *Default subject* and *Default message* fields, will be replaced with the actual trigger status and trigger name values.

In the most simple case, if we do not add any more specific conditions, the action will be taken upon any trigger change from 'Ok' to 'Problem'.

We still should define what the action should do - and that is done in the *Operations* tab. Click on *New* in there, which opens a new operation form.

Action
Conditions
Operations

Default operation step duration
 (minimum 60 seconds)

Action operations

STEPS	DETAILS	START IN	DURATION (SEC)	ACTION										
<div> <div>Operation details</div> <div> <div>Steps</div> <div> <input type="text" value="1"/> - <input type="text" value="1"/> </div> <div> <div>Step duration</div> <div> <input type="text" value="0"/> (minimum 60 seconds, 0 - use action default) </div> </div> <div> <div>Operation type</div> <div>Send message</div> </div> <div> <div>Send to User groups</div> <table> <thead> <tr> <th>USER GROUP</th> <th>ACTION</th> </tr> </thead> <tbody> <tr> <td><a href="#">Add</a></td> <td></td> </tr> </tbody> </table> </div> <div> <div>Send to Users</div> <table> <thead> <tr> <th>USER</th> <th>ACTION</th> </tr> </thead> <tbody> <tr> <td>user (New User)</td> <td><a href="#">Remove</a></td> </tr> <tr> <td><a href="#">Add</a></td> <td></td> </tr> </tbody> </table> </div> <div> <div>Send only to</div> <div>Email</div> </div> <div> <div>Default message</div> <input checked="" type="checkbox"/> </div> <div> <div>Conditions</div> <div> <a href="#">Add</a> <a href="#">Cancel</a> </div> </div> </div> </div>					USER GROUP	ACTION	<a href="#">Add</a>		USER	ACTION	user (New User)	<a href="#">Remove</a>	<a href="#">Add</a>	
USER GROUP	ACTION													
<a href="#">Add</a>														
USER	ACTION													
user (New User)	<a href="#">Remove</a>													
<a href="#">Add</a>														

Add

Cancel

Here, click on *Add* in the *Send to Users* block and select the user ('user') we have defined. Select 'Email' as the value of *Send only to*. When done with this, click on *Add* in the operation detail block.

That is all for a simple action configuration, so click *Add* in the action form.

## Receiving notification

Now, with delivering notifications configured it would be fun to actually receive one. To help with that, we might on purpose increase the load on our host - so that our trigger "fires" and we receive a problem notification.

Open the console on your host and run:

```
cat /dev/urandom | md5sum
```

You may run one or several of these processes [http://en.wikipedia.org/wiki/Md5sum].

Now go to *Monitoring* → *Latest data* and see how the values of 'CPU Load' have increased. Remember, for our trigger to *fire*, the 'CPU Load' value has to go over '2' for 3 minutes running. Once it does:

- in *Monitoring* → *Triggers* you should see the trigger with a flashing 'Problem' status
- you should receive a problem notification in your e-mail

If notifications do not work:

- verify once again that both the e-mail settings and the action have been configured properly

- make sure the user you created has at least read permissions on the host which generated the event, as noted in the *Adding user* step. The user, being part of the 'Zabbix administrators' user group must have at least read access to 'Linux servers' host group that our host belongs to.
  - Additionally, you can check out the action log by going to *Reports* → *Action log*.
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