

Zabbix Server Health Check

The Documentation of creating Zabbix server health check and sending the data through the telegram.

The references:

[Zabbix server external check configuration](#)

[Resolving The information type trigger automatically in Zabbix](#)

The start point is writing a bash script to give data from the server that Zabbix is running on it, the example script looks like this:

```
health_check.sh
1 #!/bin/bash
2
3
4 host_name="Hostname: $HOSTNAME"
5 echo "$host_name"
6
7 up_time="System Uptime Days/(HH:MM): $(uptime | awk '{print $3,$4}' | cut -f 1 -d,)"
8 echo "$up_time"
9
10 logged_in_user="Logged In users : $(who)"
11 echo "$logged_in_user"
12
13 ram_usage=$(free -h | grep total && free -h | grep Mem:)
14 echo "$ram_usage"
15
16 swap_usage=$(free -h | grep total && free -h | grep Swap:)
17 echo "$swap_usage"
18
19 zombie="zombie: $(ps aux | awk {'print $8'}|grep -c Z) "
20 echo "$zombie"
21
22 disk_usage=$(df -h | grep 'Filesystem\|/dev/sda*')
23 echo "$disk_usage"
24
25 cpu=$(top -bn1 | head | grep "%Cpu(s):")
26 echo "$cpu"
27
```

Note: You should put the script in Zabbix external scripts path(you can find yours in `zabbix_server.conf` file), but usually it is `/usr/lib/zabbix/externalscripts`.

Next step is creating an item in Zabbix in your desired host, The example item looks like this:

* Name

Type

* Key

* Host interface

Type of information

* Update interval

Custom intervals

| Type | Interval | Period | Action |
|--|------------------------------------|--------|------------------------|
| <input type="button" value="Flexible"/> <input checked="" type="button" value="Scheduling"/> | <input type="text" value="m0-59"/> | | Remove |
| Add | | | |

* History storage period

New application

Applications

-None-

Populates host inventory field

Description

Enabled ☒

Note: The type of item must be external check so you can use your script.

Note: Type of information must be Text.

Note: set your custom interval based on your needs.

For more information About custom intervals visit:

--- [Zabbix custom intervals documentation](#).

Next step is configuring a trigger for the item we created, the example trigger looks like this:

* Name

Zabbix Server Health Check Info

Operational data

Severity

Not classified

Information

Warning

Average

High

Disaster

* Expression

{test:health_check.sh.strlen()}>0 and
{test:health_check.sh.nodata(10)} = 0

Add

[Expression constructor](#)

OK event generation

Expression

Recovery expression

None

PROBLEM event generation mode

Single

Multiple

OK event closes

All problems

All problems if tag values match

* Tag for matching

Health

Allow manual close

☒

URL

Description

Enabled

☒

Update

Clone

Delete

Cancel

Note: The used expression in picture checks that the given data's length is not 0 and then use the nodata() function to resolve the trigger automatically after 10 seconds that the trigger runs to **PROBLEM** state.

Note: Problem event generation mode should be set to Multiple, so we can generate multiple triggers even if the last triggers are not resolved(for short time repetitive triggers.)

Note: you can enable manual close if you want to be able to close the trigger your self and not automatically.

The next Step is configuring an action to send the data to a media that you want to send your health check through it. Example media looks like this:

[Action](#)
[Operations](#)
[Recovery operations](#)
[Update operations](#)

* Name

Conditions

| Label | Name | Action |
|---------|--------|---|
| Trigger | equals | Test server: Zabbix Server Health Check Info <input type="button" value="X"/> <input type="button" value="Select"/> |

New condition

[Add](#)

Enabled ☒

* At least one operation, recovery operation or update operation must exist.

And the operation:

[Action](#)
[Operations](#)
[Recovery operations](#)
[Update operations](#)

* Default operation step duration

Default subject

Default message

Health check started at {EVENT.TIME} on {EVENT.DATE}
Host: {HOST.NAME}
{ITEM.VALUE}

Pause operations for suppressed problems ☒

Operations

| Steps | Details | Start in | Duration | Action |
|-------|---|-------------|----------|---|
| 1 | Send message to users: Admin (Zabbix Administrator) via Telegram script Send message to user groups: Zabbix administrators via Telegram script | Immediately | Default | Edit Remove |

[New](#)

* At least one operation, recovery operation or update operation must exist.

Note: Because the trigger type is INFORMATION there is no need for a recovery operation.

Note: You can send the message to your defined media.

For creating a Telegram Media Type you can use these docs:

[The Github Repo of building telegram media in Zabbix.](#)

[My guide to how to set up the telegram media in Zabbix based on Zabbix in telegram GitHub repository](#)