# Receiving Zabbix notifications via Signal

An alternative to WhatsApp

Event name



#### whoami

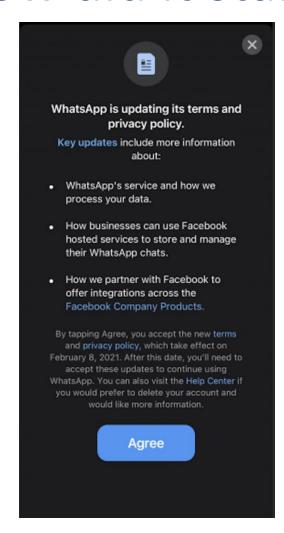
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- Zabbix trainer
- Network engineer



## How did it start?

https://www.whatsapp.com/legal/updates/privacy-policy



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#### Alternatives

- Telegram (400 million active users)
- Signal (50 million active users)
- Other media

- Smoke signals
- Snail mail

## Getting alerts in one application

- Zabbix sends alerts (hopefully not that many)
- Signal offers an API

## Profit!

Note: Signal forces us to provide phone number. And you don't want to use your own phone number!

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## Let's get started.

- Prerequisites / used setup:
  - Zabbix 5.2
  - CentOS8

• All phone numbers must include the country calling code, i.e. the number must start with a "+" sign:

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Example: +1929377125

## Installation of Signal-CLI

Open your terminal, make sure you've got sufficient permissions and download the package:

```
export VERSION="0.7.3" wget https://github.com/AsamK/signal-cli/releases/download/v"${VERSION}"/signal-cli-"${VERSION}".tar.gz
```

#### Extract and make symlinks:

```
sudo tar xf signal-cli-"${VERSION}".tar.gz -C /opt
sudo In -sf /opt/signal-cli-"${VERSION}"/bin/signal-cli /usr/local/bin/
```

## Register against Signal

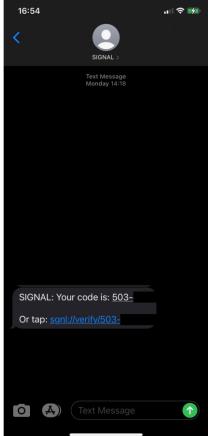
As 'Zabbix' user we will call Signal-cli and register our phone number:

runuser -l zabbix -c 'signal-cli <NUMBER> register'

Within a few seconds, you will receive a text message at this phone number:

Back to the terminal and finish the registration:

runuser -l zabbix -c 'signal-cli <NUMBER> verify <CODE>'





## Sending messages from the terminal

After the registration, test if you're able to send a message from your

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terminal:

signal-cli -u <number> send -m "Test registration" <receiver>

Hopefully, you will see something like this:

Perfect! We're almost done here.



## Zabbix alert script

Since we are using Signal-CLI we have to comply with their. Format.
 Meaning we need an alert script to meet those requirements

#### Create a new script in /usr/lib/zabbix/alertscripts/

```
vim /usr/lib/zabbix/alertscripts/signal.sh
```

```
#!/bin/bash
signal-cli -u '<number>' send -m "$1" $2
```

#### Set the correct permissions:

chmod 700 /usr/lib/zabbix/alertscripts/signal.sh chown zabbix:zabbix /usr/lib/zabbix/alertscripts/signal.sh



## Frontend setup

• Time to build our own mediatype:

Navigate to Administration | Media types And click on "create media type"

• Name: Signal

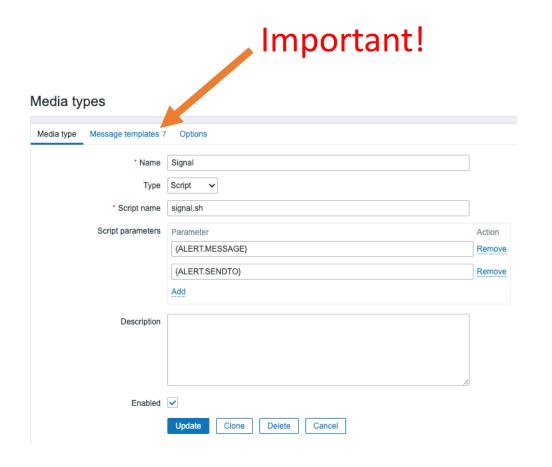
• **Type:** Script

Script name: signal.sh

Script parameters:

{ALERT.MESSAGE} {ALERT.SENDTO}

Do not forget to create "message templates".
You can use the defaults!



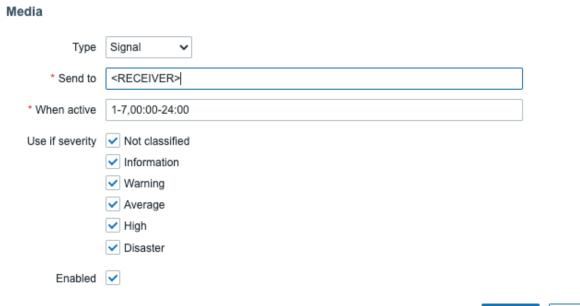


11

### Add media to user

Navigate to Administration | Users or just edit your user profile

Second tab("media") and add a new media there with the following settings:



Note: Of course you should replace '<RECEIVER>' with your own phone number

O<sub>k</sub>

Cancel

12

Update

×

## Configure or reconfigure your actions

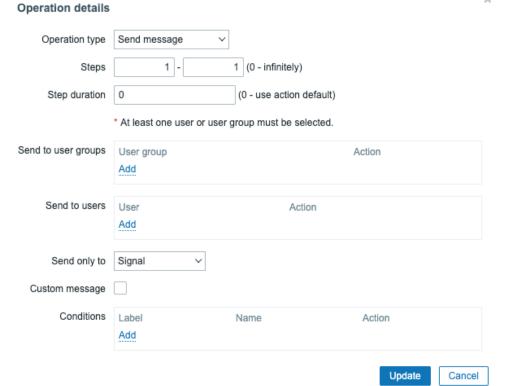
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Navigate to Configuration | Actions

Find the action you always use and click on tab "operations" within it.

You should adjust "Send only to" to reflect "Signal"

If you have "-All-" configured, it should work already





13

## **Testing**

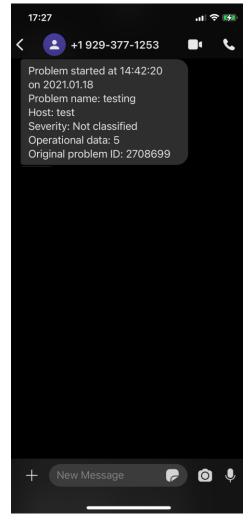
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Or wait till you've got a real problem

- Create a host
- On that host, item of type "Zabbix trapper"
- On that item trigger: if last value>1

Make sure the host is matched by your action!

## Result:



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## Wrap up

- Download Signal-cli
- Register your phone number
- Create Zabbix alertscript
- Configure Zabbix mediatype, media and action in the frontend
- Test

• Profit!



## Need a recap?

No problem!
Check out the blog post:

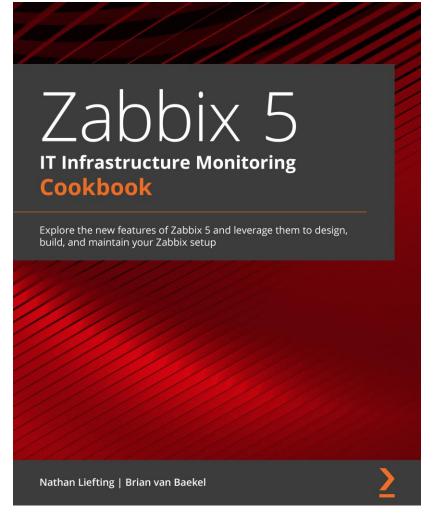
https://blog.zabbix.com/



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- How to setup and work with Zabbix monitoring
- Working to keep Zabbix structured
- Making sure to maintain Zabbix performance overtime
- From start to finish, from installation to API.
- Please leave an Amazon review, we'd love to read them!

https://www.amazon.com/gp/product/B08NX17XT8





18

## Thank you

**Questions?** 

