

You should install and configure Zabbix server and agents.

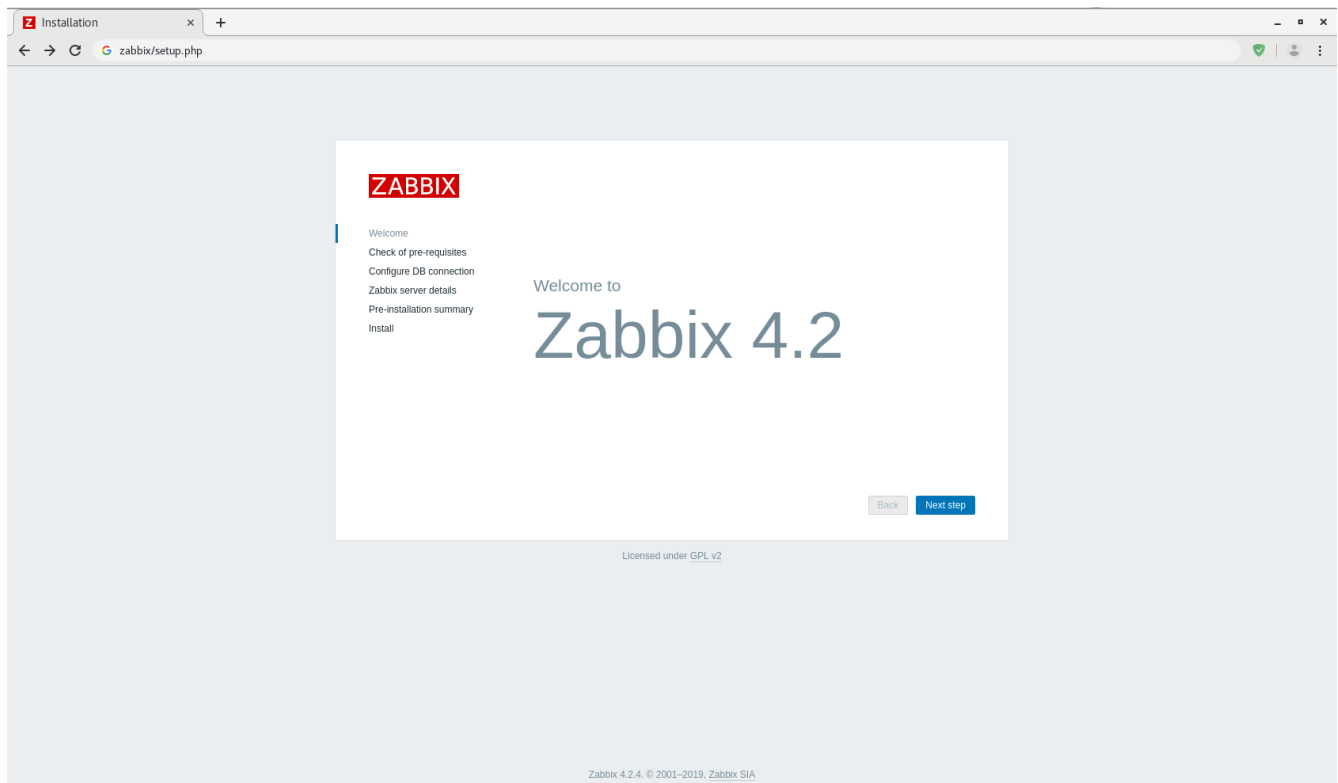
Testing Infrastructure:

Vagrantfile to spin up 2 VMs (virtualbox):

1. Zabbix server, provisioned by Vagrant provisioner
2. Zabbix agents on both VMs, provisioned by Vagrant provisioner

Configure zabbix to work on the server directly without /zabbix

`http://zabbix-server/zabbix -> http://zabbix-server`



Picture 1

Using Zabbix UI:

- Create User group “Project Owners”

zabbix-srv: Configuration

192.168.50.100/zabbix/usergrps.php?form=create

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users Media types Scripts Queue

User groups

User group Permissions Tag filter

* Group name: Project Owners

Users: type here to search [Select]

Frontend access: System default

Enabled: ☒

Debug mode: ☐

[Add] [Cancel]

Picture 2.1

zabbix-srv: Configuration

192.168.50.100/zabbix/usergrps.php

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users Media types Scripts Queue

Group added

User groups

Create user group

Filter

Name: [] Status: Any Enabled Disabled

[Apply] [Reset]

<input type="checkbox"/>	Name	#	Members	Frontend access	Debug mode	Status
<input type="checkbox"/>	Disabled	Users		System default	Disabled	Disabled
<input type="checkbox"/>	Enabled debug mode	Users		System default	Enabled	Enabled
<input type="checkbox"/>	Guests	Users 1	guest	Internal	Disabled	Enabled
<input type="checkbox"/>	No access to the frontend	Users		Disabled	Disabled	Enabled
<input type="checkbox"/>	Project Owners	Users		System default	Disabled	Enabled
<input type="checkbox"/>	Zabbix administrators	Users 1	Admin (Zabbix Administrator)	System default	Disabled	Enabled

0 selected [Enable] [Disable] [Enable debug mode] [Disable debug mode] [Delete]

Displaying 6 of 6 found

Picture 2.2

- Create User (example “Siarhei Beliakou”), assign user to “Project Owners”, set email

zabbix-srv: Configuration x +

192.168.50.100/zabbix/users.php?form=create

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users Media types Scripts Queue

Users

User Media Permissions

* Alias HKanonik

Name Hleb

Surname Kanonik

* Groups Project Owners X
type here to search Select

* Password *****

* Password (once again) *****

Password is not mandatory for non internal authentication type.

Language English (en_GB)

Theme System default

Auto-login ☐

Auto-logout 15m

* Refresh 30s

* Rows per page 50

URL (after login)

Add Cancel

Picture 3.1

zabbix-srv: Configuration x +

192.168.50.100/zabbix/users.php?form=update&userid=3

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users Media types Scripts Queue

Users

User Media Permissions

Media Type Send to When active Use if severity Status Action

Add

Update Delete Cancel

Media

Type Email

* Send to hleb_kanonik@epam.com Remove

Add

* When active 1-7:00:00-24:00

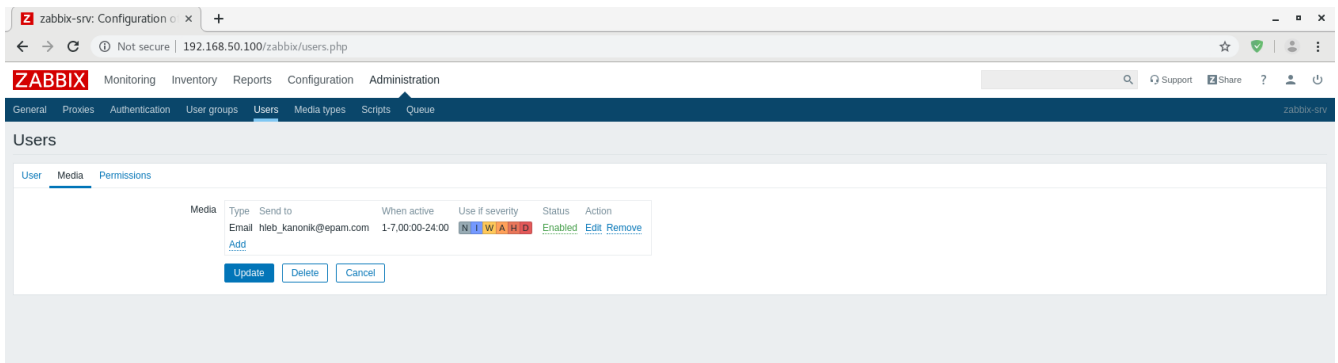
Use if severity

- ☒ Not classified
- ☒ Information
- ☒ Warning
- ☒ Average
- ☒ High
- ☒ Disaster

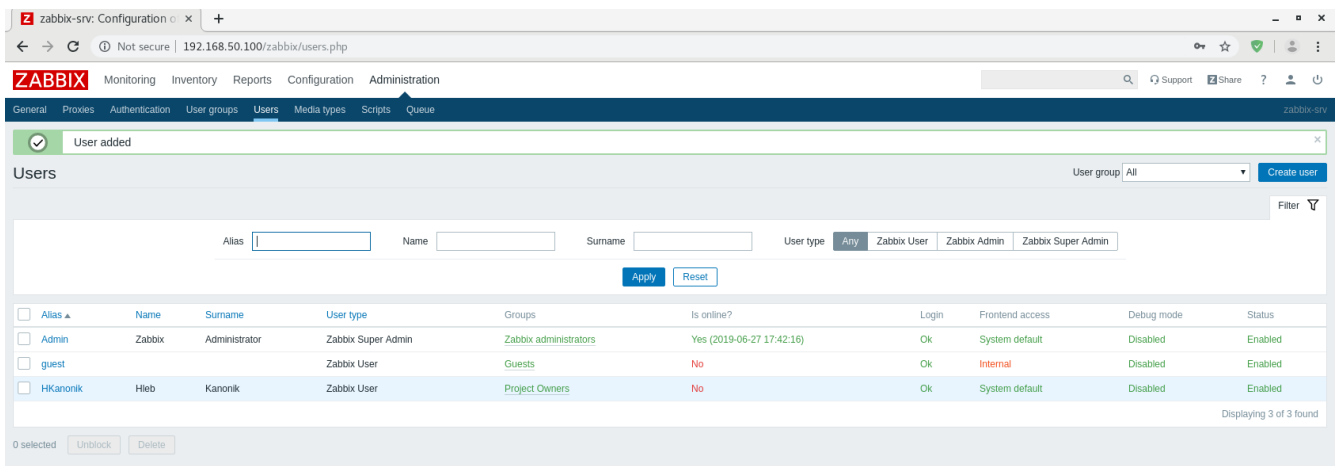
Enabled ☒

Add Cancel

Picture 3.2

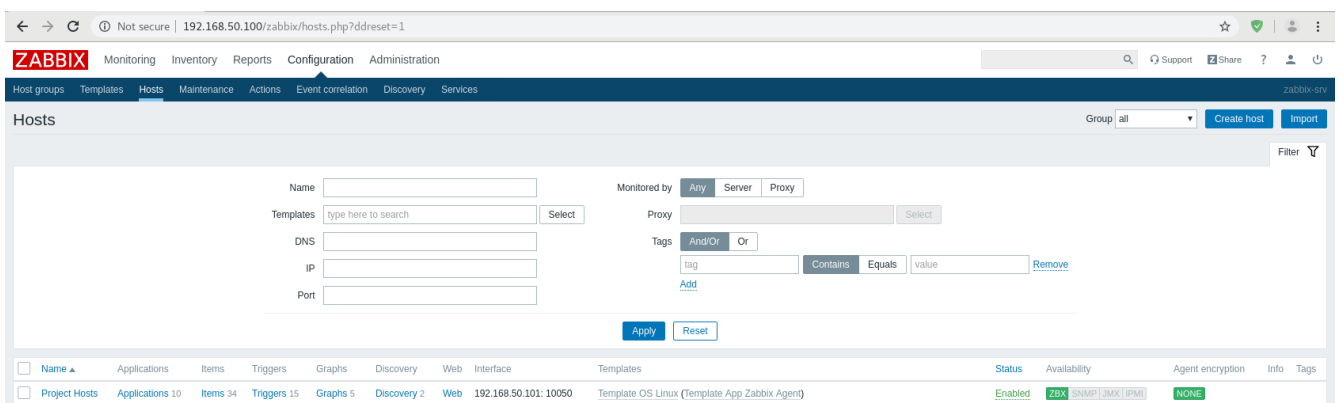


Picture 3.3



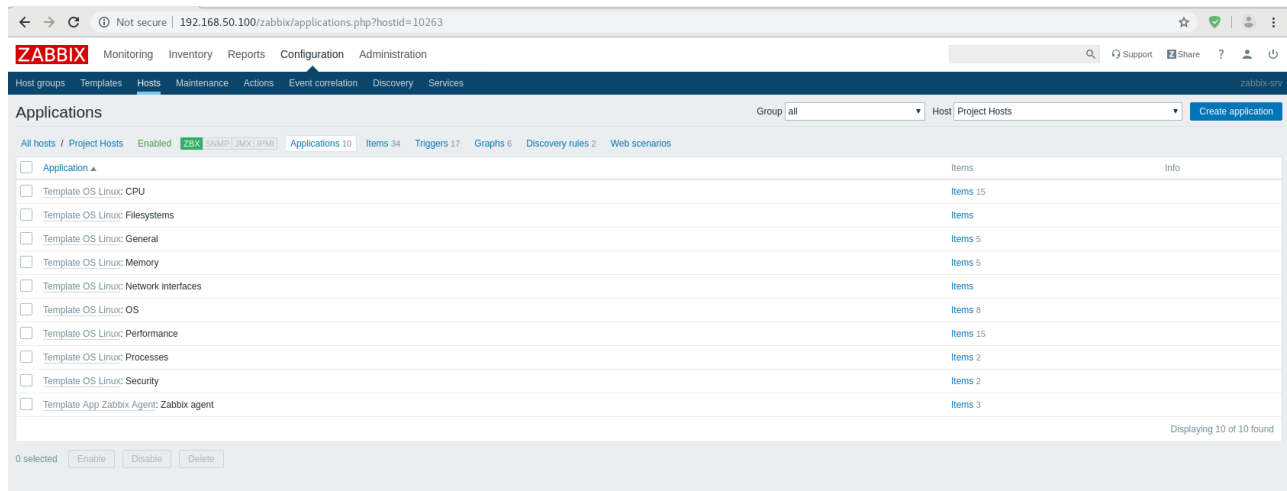
Picture 3.4

- Add 2nd VM to zabbix: create Host group (“Project Hosts”), create Host in this group, enable ZABBIX Agent monitoring



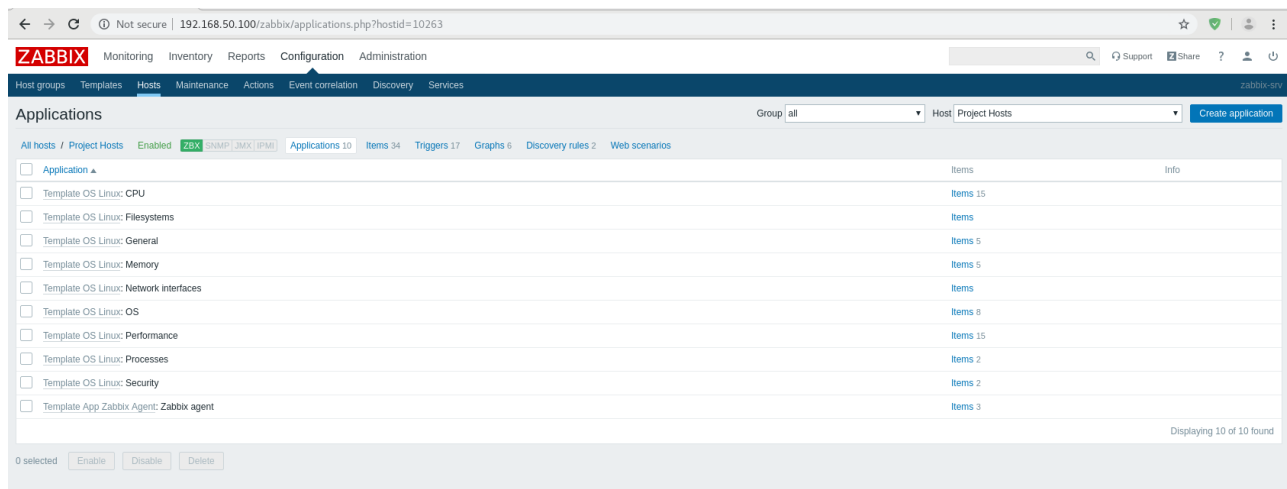
Picture 4

- Assign to this host template of Linux

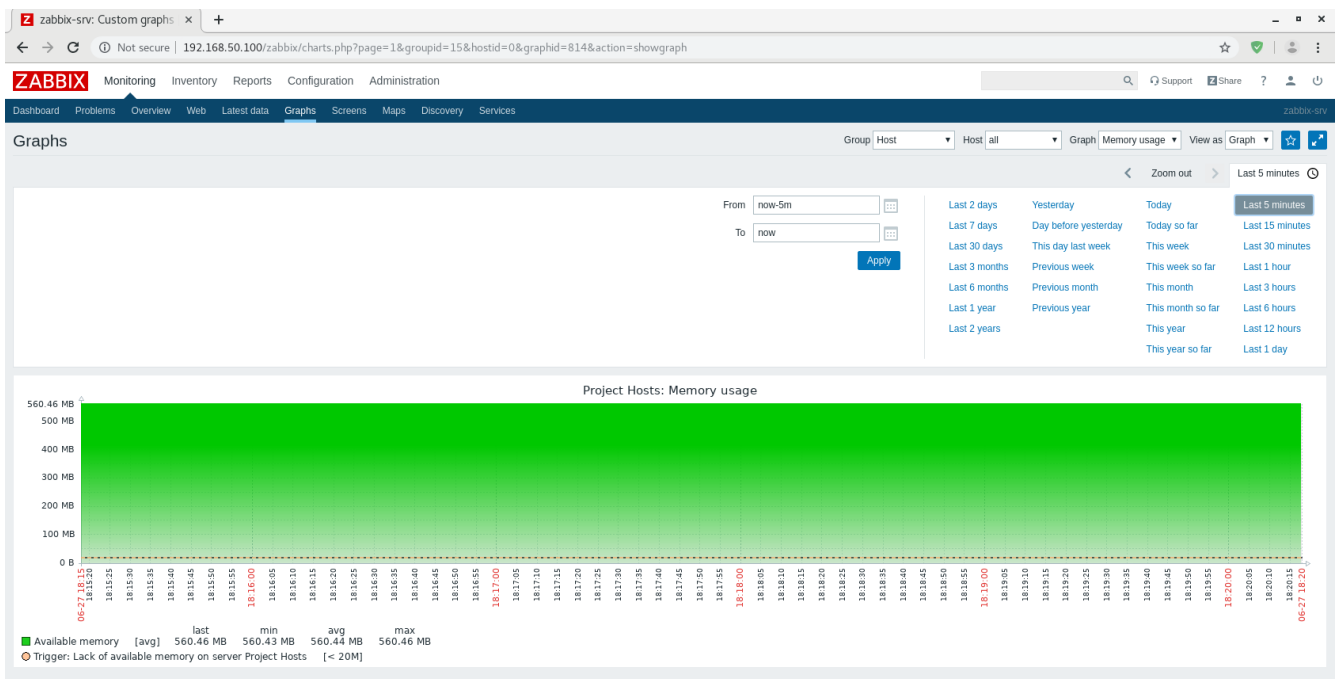


Picture 5

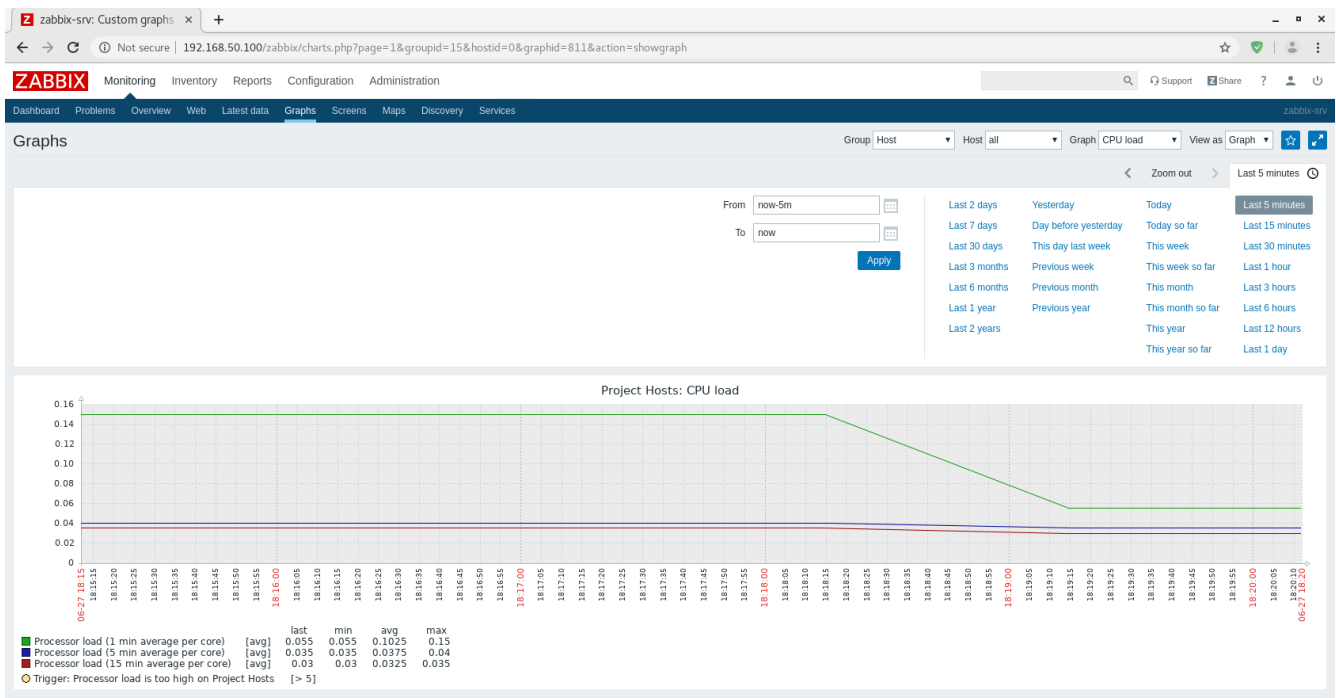
- Create custom checks (CPU Load, Memory load, Free space on file systems, Network load)



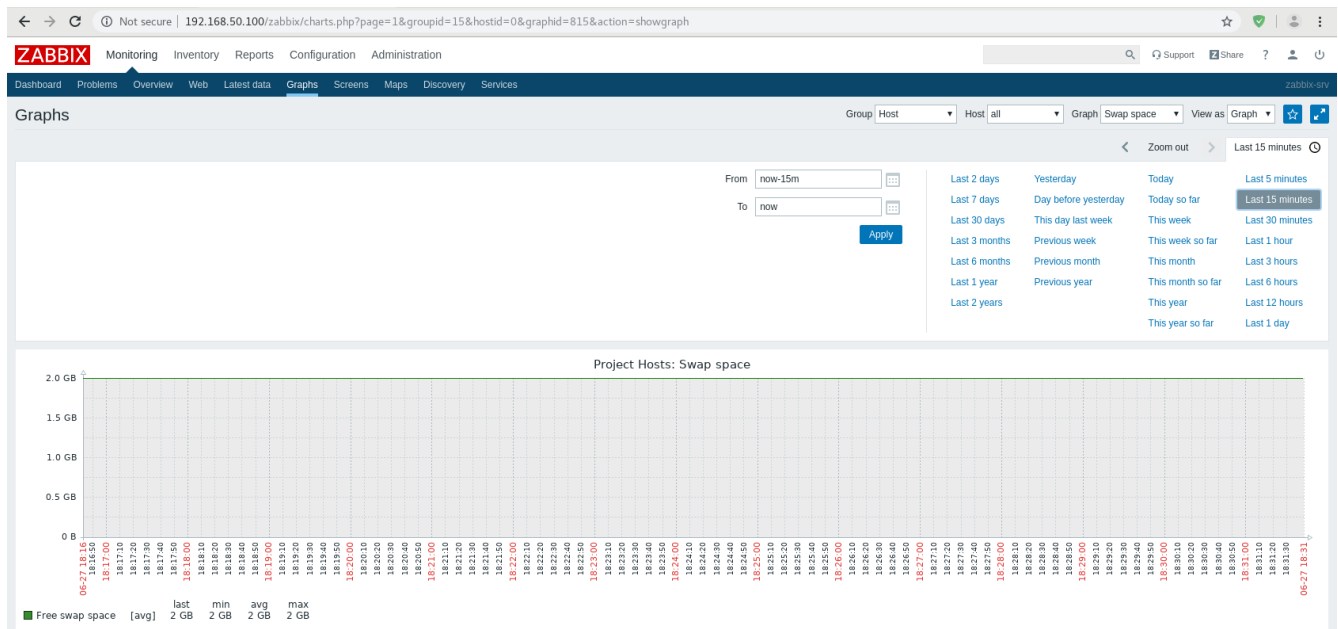
Picture 5.1



Picture 5.2



Picture 5.3



Picture 5.4

- Create trigger with Severity HIGH, check if it works (Problem/Recovery)

zabbix-srv: Configuration

Host groups / Templates / Hosts / Maintenance / Actions / Event correlation / Discovery / Services

Triggers

All hosts / Project Hosts Enabled 28X SNMP [JMX] [PMI] Applications 10 Items 34 Triggers 15 Graphs 5 Discovery rules 2 Web scenarios

Trigger Tags Dependencies

Name: false trigger

Severity: Not classified Information Warning Average **High** Disaster

Expression: [Template OS Linux:system.swap.size[pfree].last(#10,1)]<1

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

Allow manual close: ☐

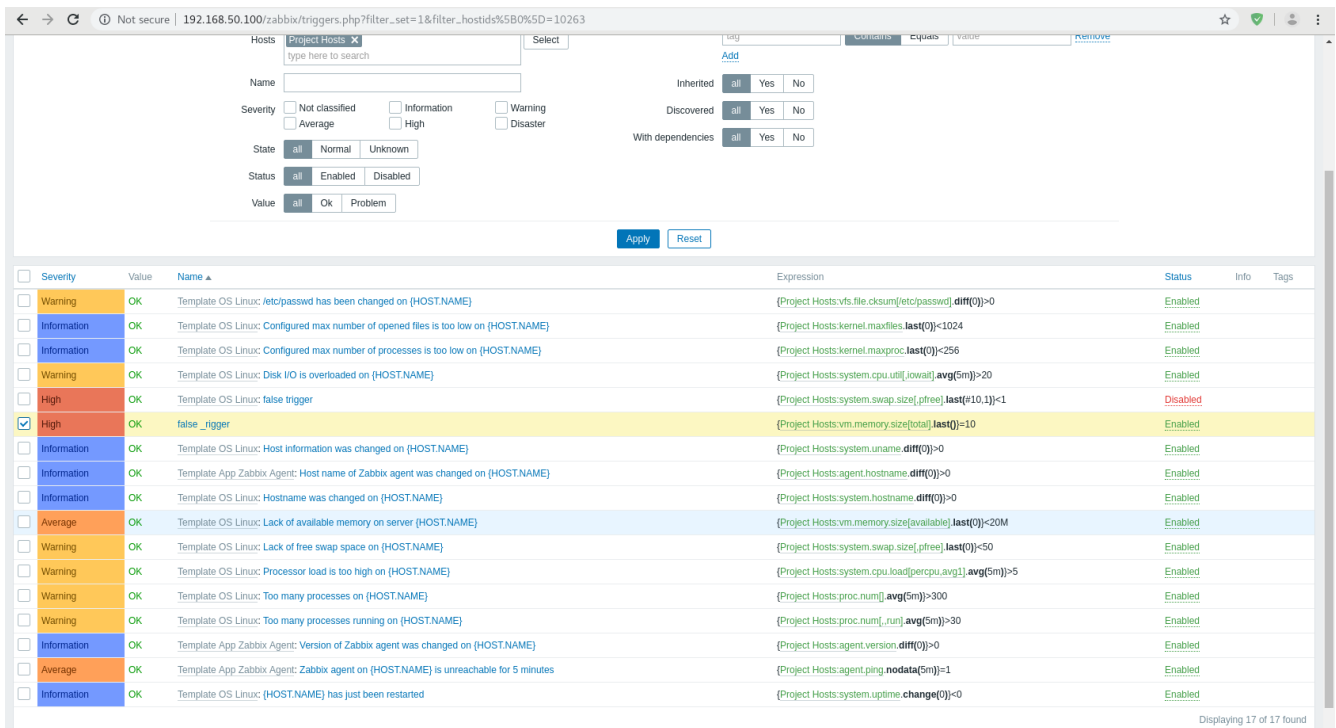
URL: https://unix.stackexchange.com/questions/59450/swap-usage-too-high

Description: Resolve problem!

Enabled: ☒

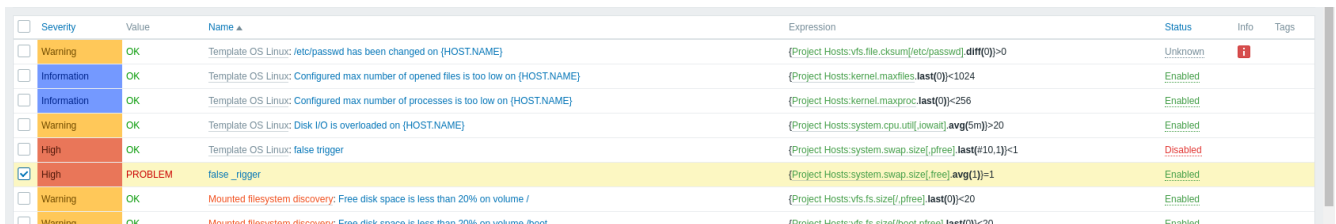
Add Cancel

Picture 6.1

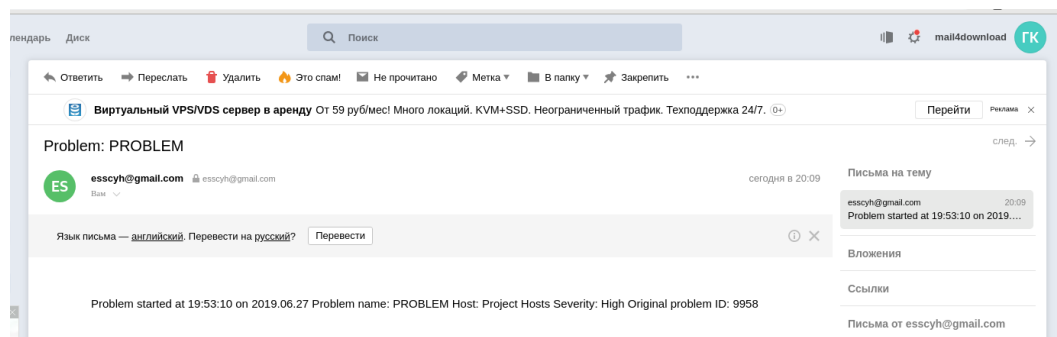


Picture 6.2

- Create Action to inform “Project Owners” if HIGH triggers happen



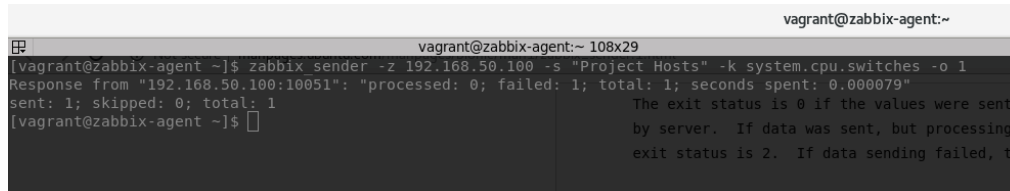
Picture 7.1



Picture 7.2

Task 2

- Configure the agent for replying to the specific server in passive and active mode.
- Use `zabbix_sender` to send data to server manually (use `zabbix_sender` with key `-vv` for maximal verbosity).



```
vagrant@zabbix-agent:~  
[vagrant@zabbix-agent ~]$ zabbix_sender -z 192.168.50.100 -s "Project Hosts" -k system.cpu.switches -o 1  
Response from "192.168.50.100:10051": "processed: 0; failed: 1; total: 1; seconds spent: 0.000079"  
sent: 1; skipped: 0; total: 1  
[vagrant@zabbix-agent ~]$
```

The exit status is 0 if the values were sent by server. If data was sent, but processing exit status is 2. If data sending failed, 1

Picture 9

- Use `zabbix_get` as data receiver and examine zabbix agent sending's.



```
vagrant@zabbix-srv:~  
[vagrant@zabbix-srv ~]$ zabbix_get -s 192.168.50.101 -p 10050 -k "system.cpu.util[,idle]"  
99.983314  
[vagrant@zabbix-srv ~]$
```

ZABBIX Zabbix Documentation 3.2
2.2 3.0 4.0 4.2 (current) In development: 4.4 (devel) Unsupported: 1.8 2.0 2.4 3.2 3.4

Picture 9