

EPAM Systems, RD Dep., RD Dep.

# MTN.NIX.05.Zabbix.Basics

REVISION HISTORY					
Ver.	Description of Change	Author	Date	Approved	
				Name	Effective Date
1.0	Initial Version	Siarhei Beliakou	23/May/2017		

## Task. Zabbix. Basics

### Testing Infrastructure:

Vagrantfile to spin up 2 VMs (virtualbox):

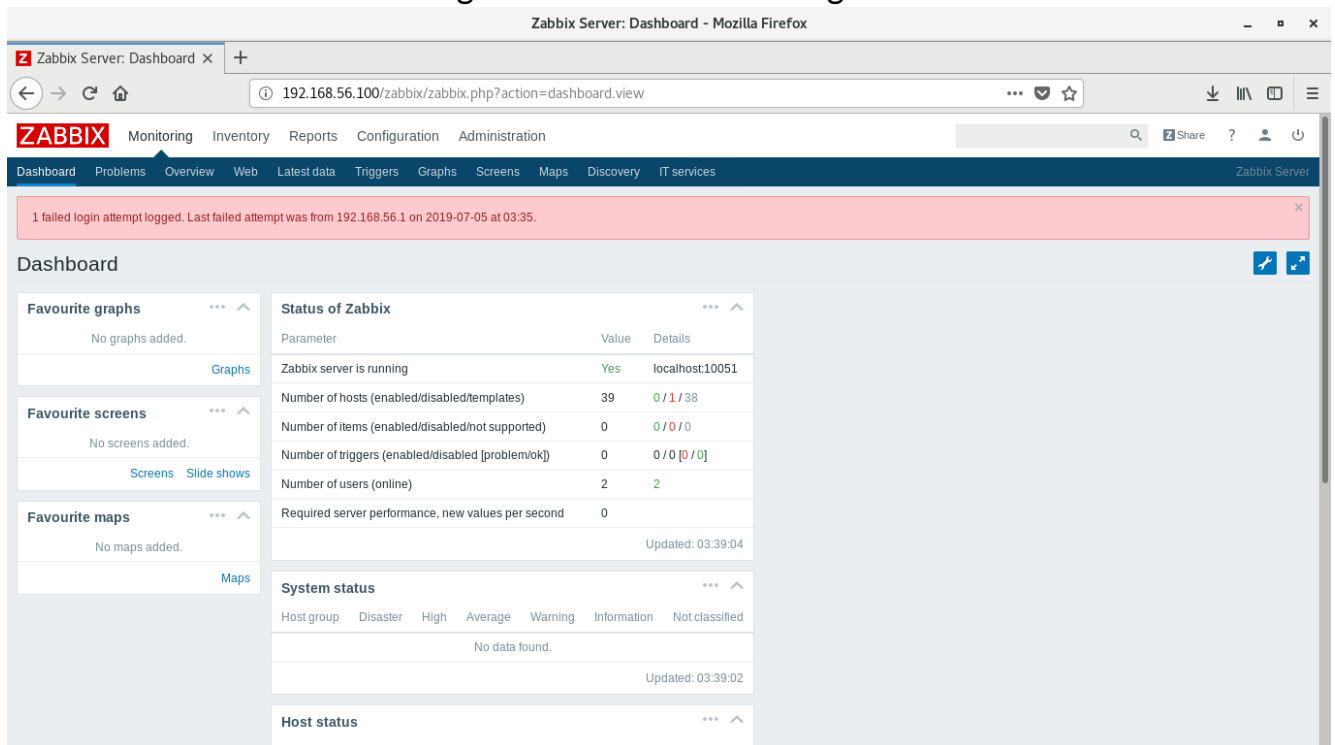
- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner

Configure zabbix to work on the server directly without /zabbix

<http://zabbix-server/zabbix> -> <http://zabbix-server>

### Task:

You should install and configure Zabbix server and agents.



### 1. Using Zabbix UI:

- Create User group "Project Owners"

Zabbix Server: Configuration of user groups - Mozilla Firefox

Zabbix Server: Configurati: X

192.168.56.100/zabbix/usergrps.php?form=update&usrgrpid=13

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users Media types Scripts Queue

## User groups

User group Permissions

Group name Project Owners

Users In group

Other groups All

Admin (Zabbix Administrator)  
guest

Frontend access System default

Enabled ☒

Debug mode ☐

Update Delete Cancel

Zabbix 3.2.11. © 2001–2017, Zabbix SIA

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

Zabbix Server: Configuration of users - Mozilla Firefox

Zabbix Server: Configurati: X

95 · Входящие — Яндекс: X

192.168.56.100/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

Alias sbeliakou

Name Siarhei

Surname Beliakou

Groups Project Owners X  
type here to search

Select

Password Change password

Language English (en\_GB)

Theme System default

Auto-login ☐

Auto-logout (min 90 seconds) ☐ 900

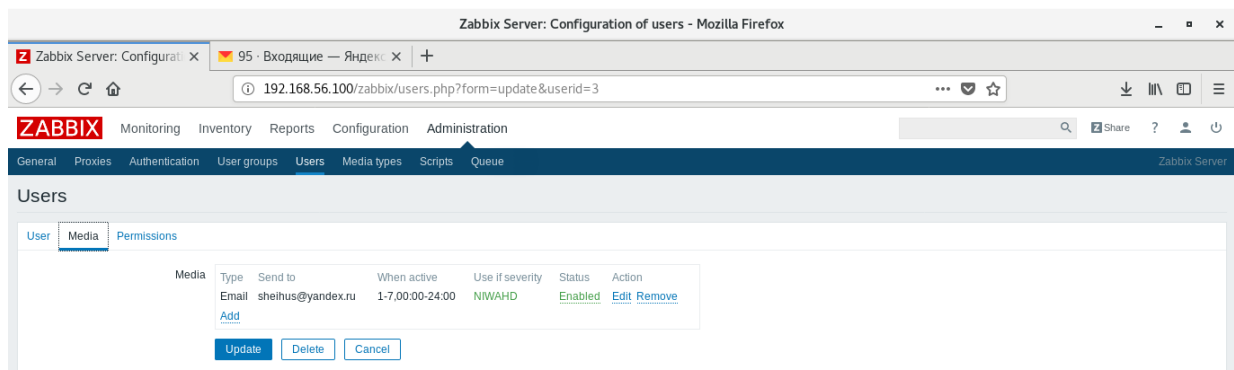
Auto-logout (min 90 seconds) ☐ 900

Refresh (in seconds) 30

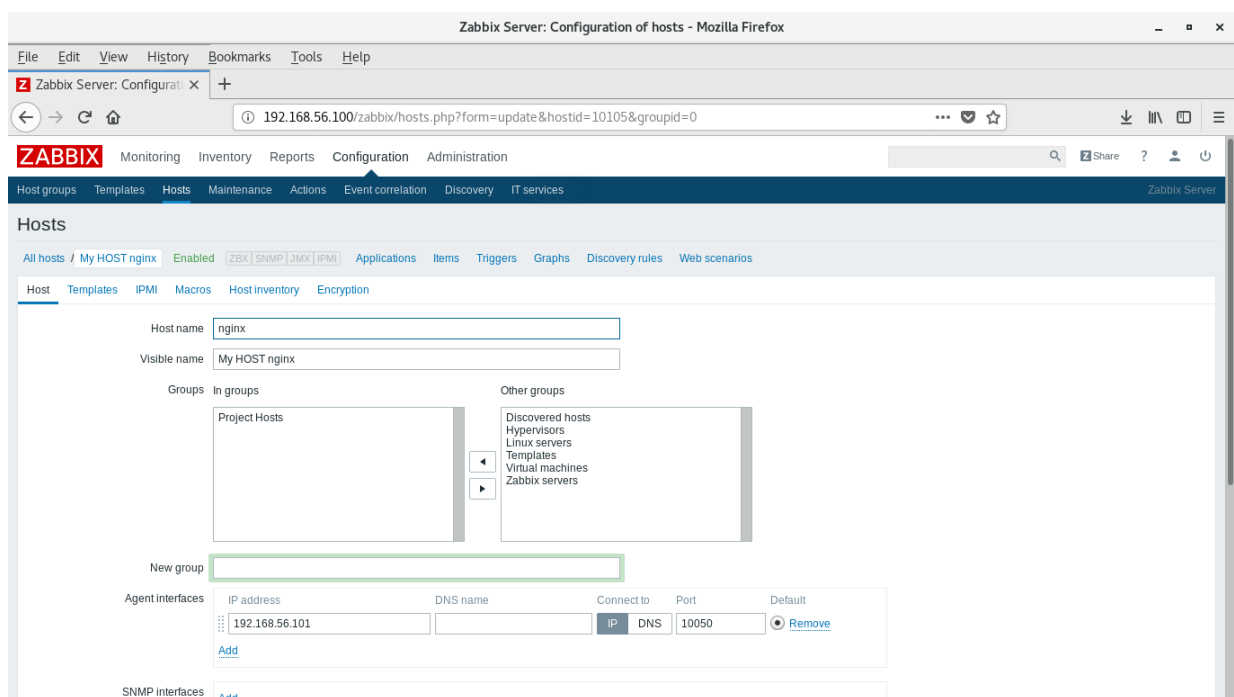
Rows per page 50

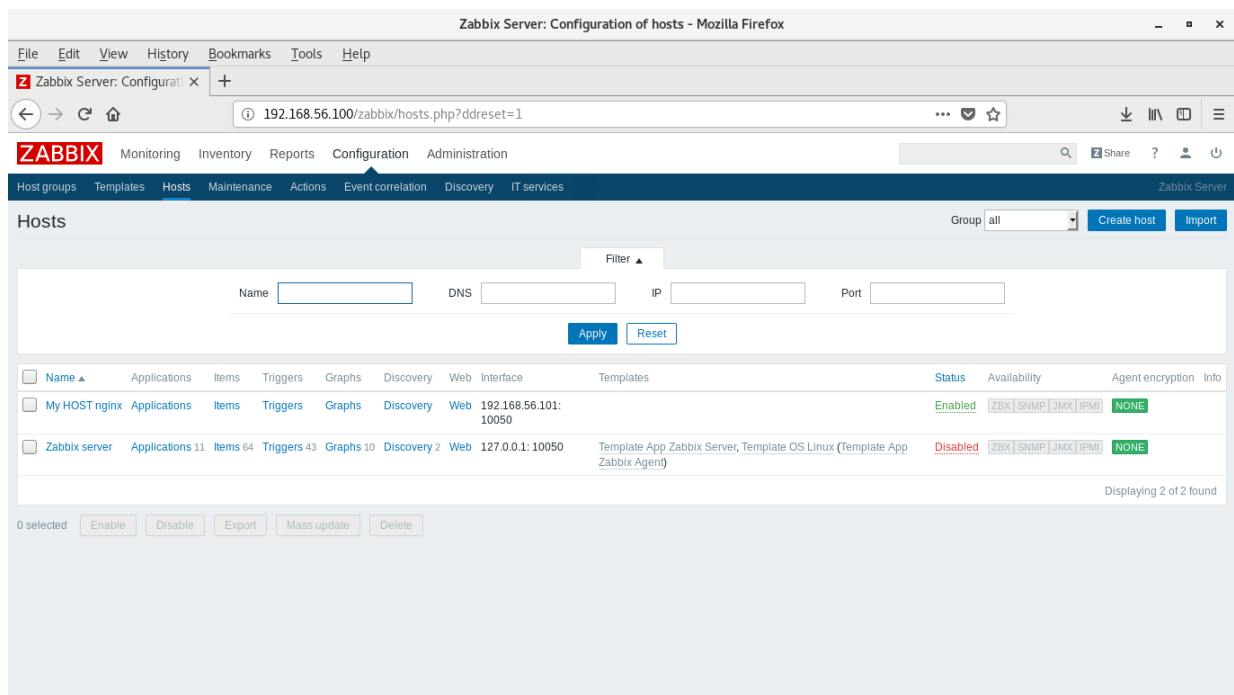
URL (after login)

Update Delete Cancel

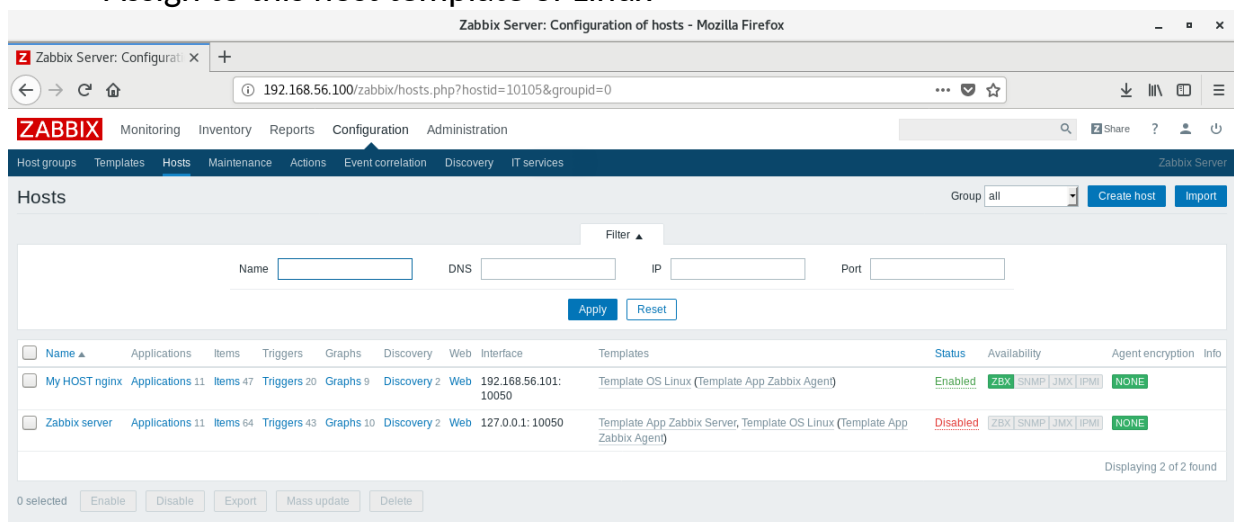


- Add 2<sup>nd</sup> VM to zabbix: create Host group (“Project Hosts”), create Host in this group, enable ZABBIX Agent monitoring

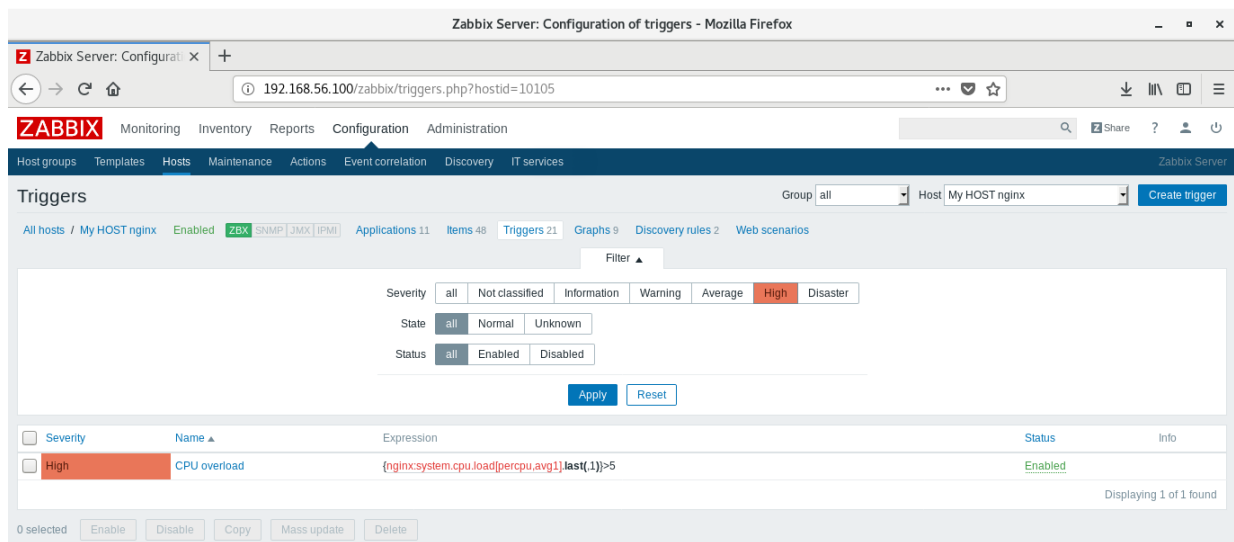




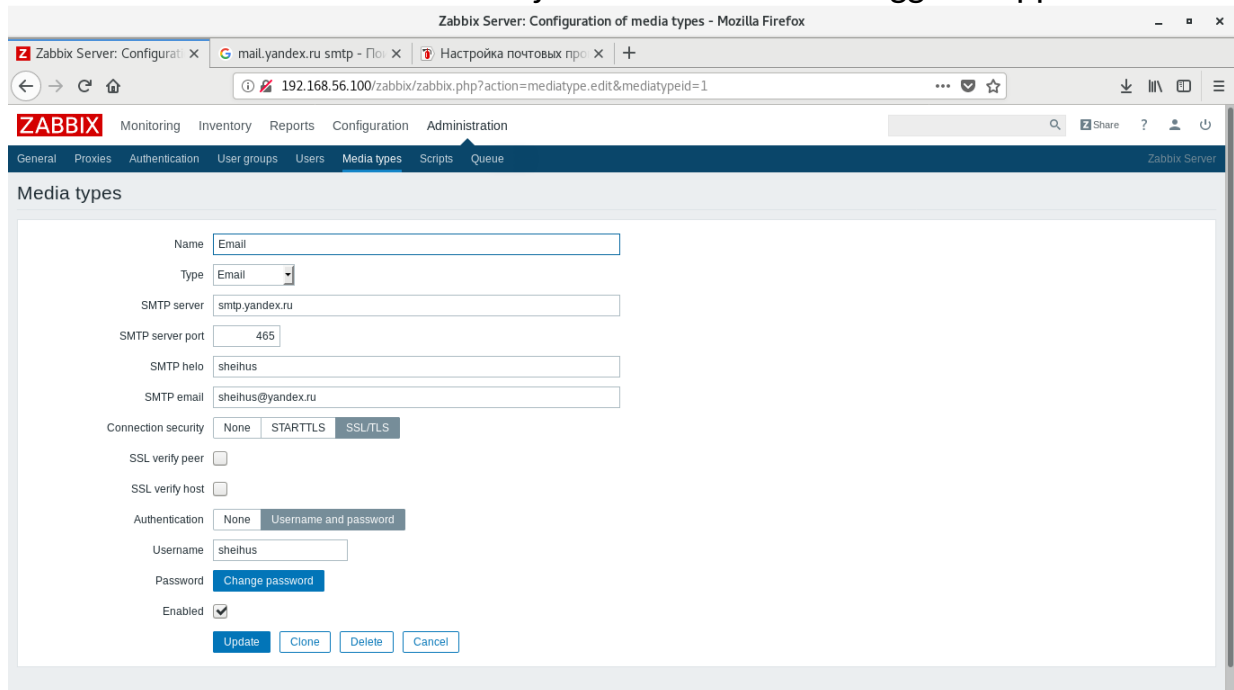
- Assign to this host template of Linux



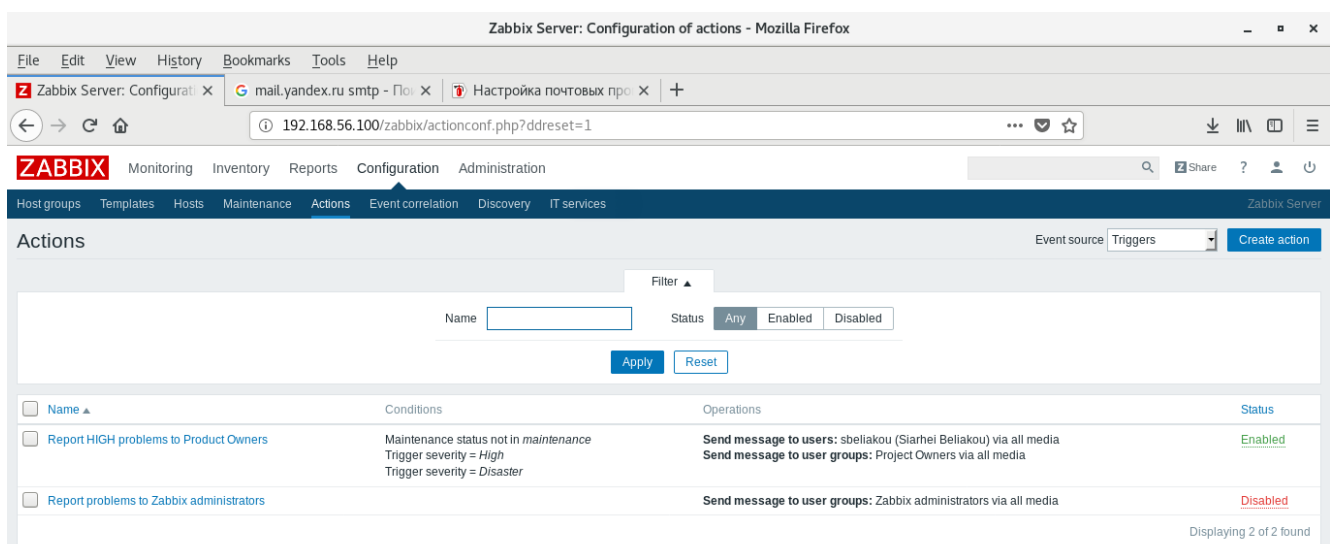
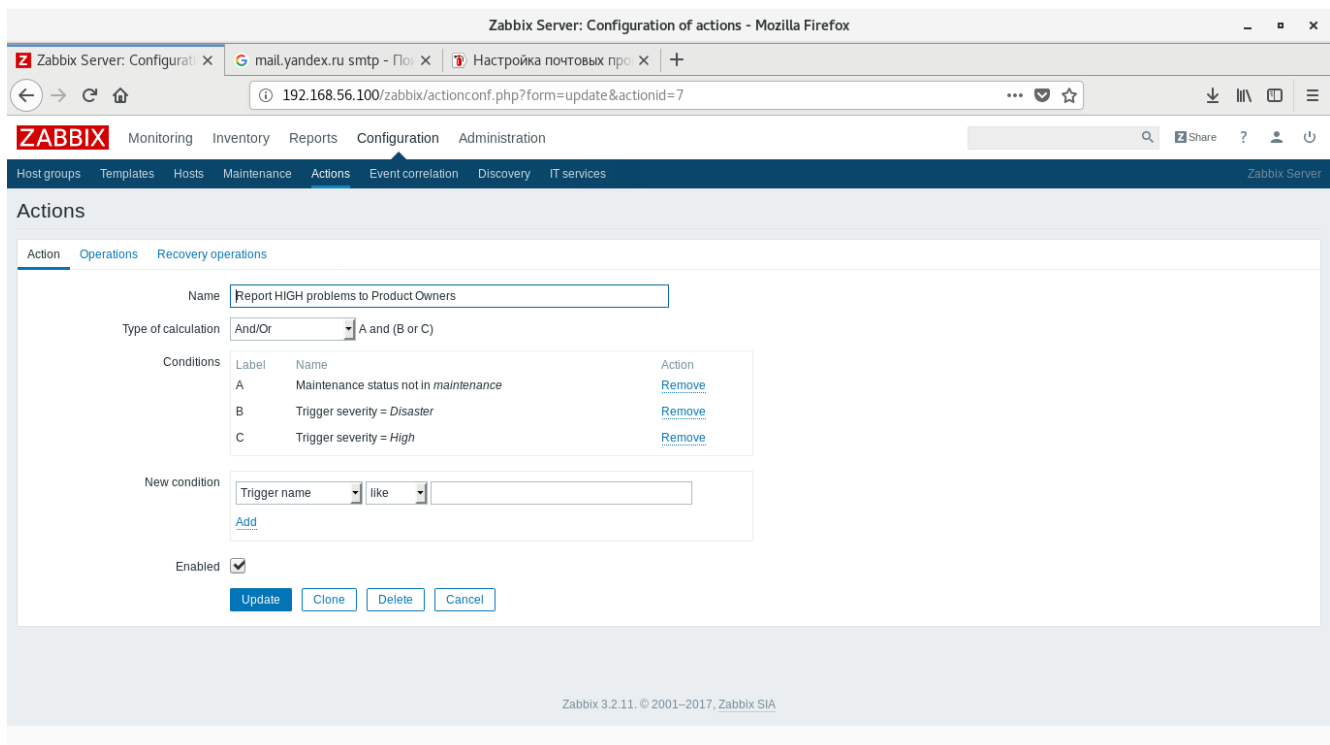
- Create custom checks (CPU Load, Memory load, Free space on file systems, Network load)
- Create trigger with Severity HIGH, check if it works (Problem/Recovery)



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



For both VMs use vagrant box “sbeliakou/centos-7.3-x86\_64-minimal”



## 2. Using Zabbix UI:

- Configure “Network discovery” so that, 2<sup>nd</sup> VM will be joined to Zabbix (group “Project Hosts”, Template “Template OS Linux”)

Zabbix Server: Configuration of discovery rules - Mozilla Firefox

Zabbix Server: Configurati... mail.yandex.ru smtp - По... Настройка почтовых про... +

192.168.56.100/zabbix/discoveryconf.php?form=Create+discovery+rule

**ZABBIX** Monitoring Inventory Reports Configuration Administration

Host groups Templates Hosts Maintenance Actions Event correlation **Discovery** IT services Zabbix Server

### Discovery rules

Name: Auto discovery: Linux servers

Discovery by proxy: No proxy

IP range: 192.168.100.1-254

Delay (in sec): 600

Checks: Zabbix agent "system.uname" [Edit](#) [Remove](#)  
[New](#)

Device uniqueness criteria: ☒ IP address ☐ Zabbix agent "system.uname"

Enabled: ☒

[Add](#) [Cancel](#)

Zabbix 3.2.11. © 2001–2017, Zabbix SIA

Zabbix Server: Configuration of discovery rules - Mozilla Firefox

Zabbix Server: Configurati... mail.yandex.ru smtp - По... Настройка почтовых про... +

192.168.56.100/zabbix/discoveryconf.php

**ZABBIX** Monitoring Inventory Reports Configuration Administration

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Discovery rule updated

[Create discovery rule](#)

### Discovery rules

Filter ▲

Name:  Status: ☒ Any ☐ Enabled ☐ Disabled

[Apply](#) [Reset](#)

<input type="checkbox"/> Name ▲	IP range	Delay	Checks	Status
<input type="checkbox"/> Auto discovery: Linux servers	192.168.100.1-254	10m	Zabbix agent	Enabled
<input type="checkbox"/> Local network	192.168.0.1-254	1h	Zabbix agent	Disabled

Displaying 2 of 2 found



Zabbix Server: Configuration of actions - Mozilla Firefox

Zabbix Server: Configurati X mail.yandex.ru smtp - Пои X Настройка почтовых про X +

192.168.56.100/zabbix/actionconf.php?form=update&actionid=2

**ZABBIX** Monitoring Inventory Reports Configuration Administration

Host groups Templates Hosts Maintenance Actions Event correlation Discovery IT services Zabbix Server

## Actions

Action Operations

Name: Auto discovery. Linux servers.

Type of calculation: And/Or A and B and C

Label	Name	Action
A	Received value like <i>Linux</i>	<a href="#">Remove</a>
B	Discovery status = <i>Up</i>	<a href="#">Remove</a>
C	Service type = <i>Zabbix agent</i>	<a href="#">Remove</a>

New condition: Host IP = 192.168.0.1-127.192.168.2.1 [Add](#)

Enabled ☒

[Update](#) [Clone](#) [Delete](#) [Cancel](#)

Zabbix Server: Configuration of actions - Mozilla Firefox

Zabbix Server: Configurati X mail.yandex.ru smtp - Пои X Настройка почтовых про X +

192.168.56.100/zabbix/actionconf.php?action=action.massenable&g\_actionid[]=2

**ZABBIX** Monitoring Inventory Reports Configuration Administration

Host groups Templates Hosts Maintenance Actions Event correlation Discovery IT services Zabbix Server

Action enabled

## Actions

Event source: Discovery [Create action](#)

Filter

Name: Status: Any Enabled Disabled

[Apply](#) [Reset](#)

Name	Conditions	Operations	Status
<input type="checkbox"/> Auto discovery. Linux servers.	Received value like <i>Linux</i> Discovery status = <i>Up</i> Service type = <i>Zabbix agent</i>	Add to host groups: Linux servers Link to templates: Template OS Linux	<a href="#">Enabled</a>

Displaying 1 of 1 found

Zabbix Server: Configuration of actions - Mozilla Firefox

192.168.56.100/zabbix/actionconf.php

**ZABBIX** Monitoring Inventory Reports **Configuration** Administration

Host groups Templates Hosts Maintenance **Actions** Event correlation Discovery IT services

### Actions

Action Operations

Name: Remove Lost Servers

Type of calculation: And/Or A and C and D

Label	Name	Action
A	Host IP = 192.168.100.1-127.192.168.100.254	<a href="#">Remove</a>
C	Uptime/Downtime >= 300	<a href="#">Remove</a>
D	Discovery status = Down	<a href="#">Remove</a>

New condition: Discovery status = Up

Enabled: ☒

[Update](#) [Clone](#) [Delete](#) [Cancel](#)

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Zabbix Server: Configuration of actions - Mozilla Firefox

192.168.56.100/zabbix/actionconf.php?ddreset=1

**ZABBIX** Monitoring Inventory Reports **Configuration** Administration

Host groups Templates Hosts Maintenance **Actions** Event correlation Discovery IT services

### Actions

Event source: Discovery [Create action](#)

Filter: Name Status Any Enabled Disabled

[Apply](#) [Reset](#)

Name	Conditions	Operations	Status
<a href="#">Auto discovery: Linux servers.</a>	Received value like Linux Discovery status = Up Service type = Zabbix agent	Add to host groups: Linux servers Link to templates: Template OS Linux	Enabled
<a href="#">Remove Lost Servers</a>	Host IP = 192.168.100.1-127.192.168.100.254	Remove host	Enabled

Displaying 2 of 2 found

For both VMs use vagrant box “sbeliakou/centos-7.3-x86\_64-minimal”