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:

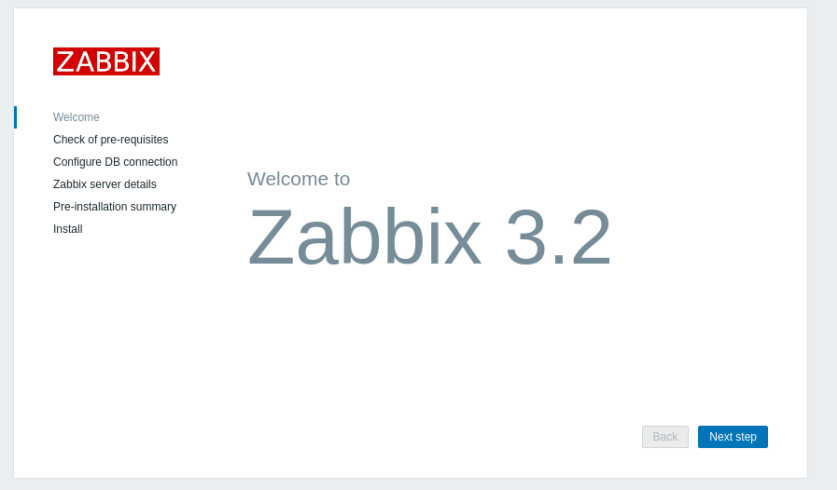
Vagrantfile to spin up 2 VMs (virtualbox):

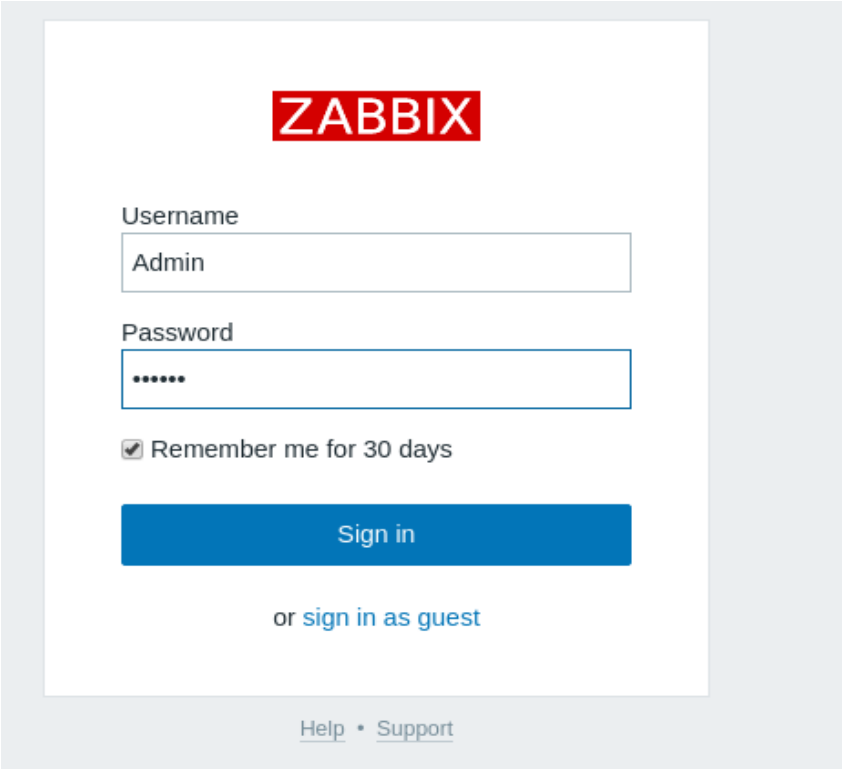
- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner

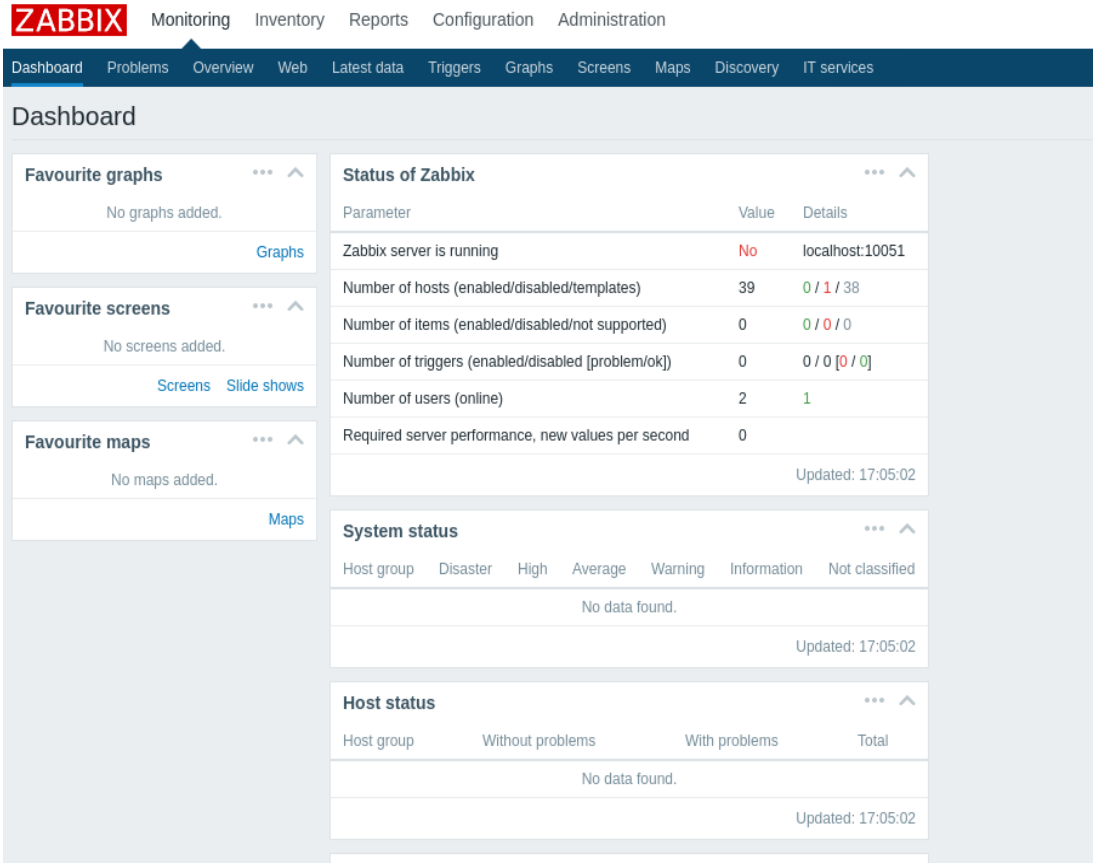
Configure zabbix to work on the server directly without /zabbix
http://zabbix-server/zabbix -> http://zabbix-server

Task:

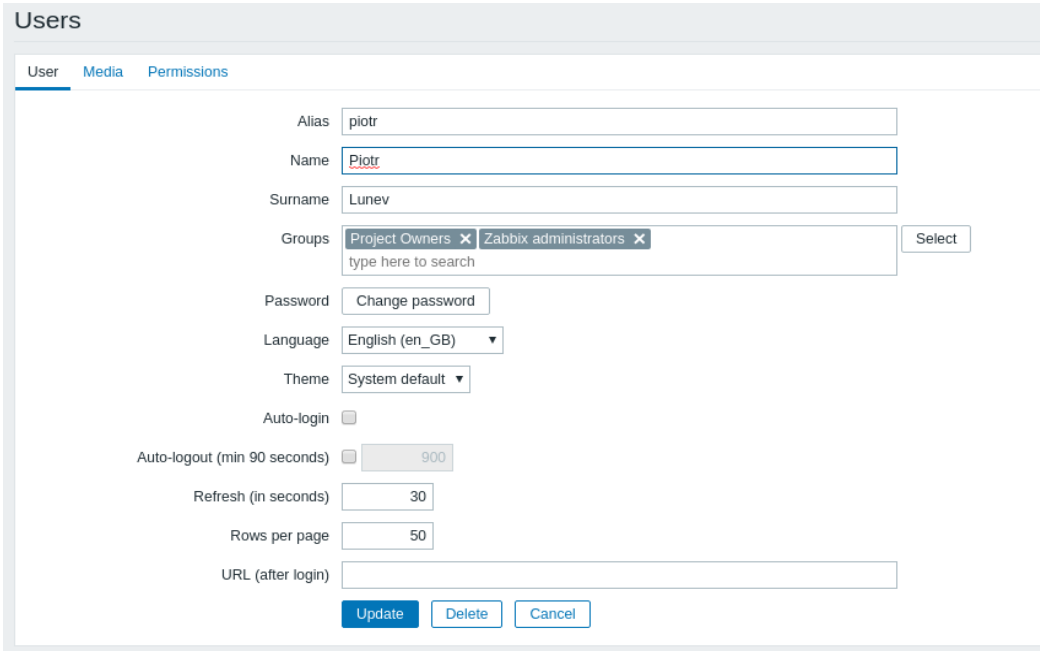
You should install and configure Zabbix server and agents.

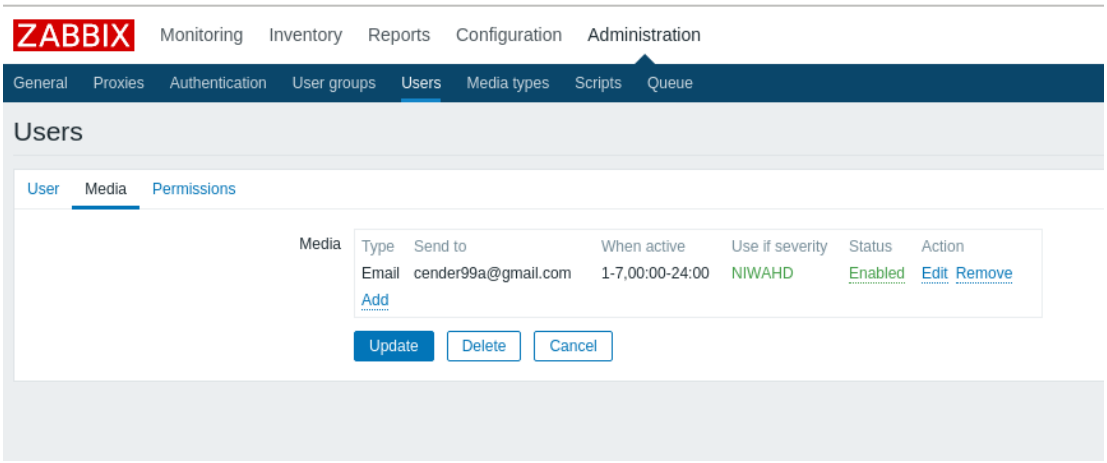




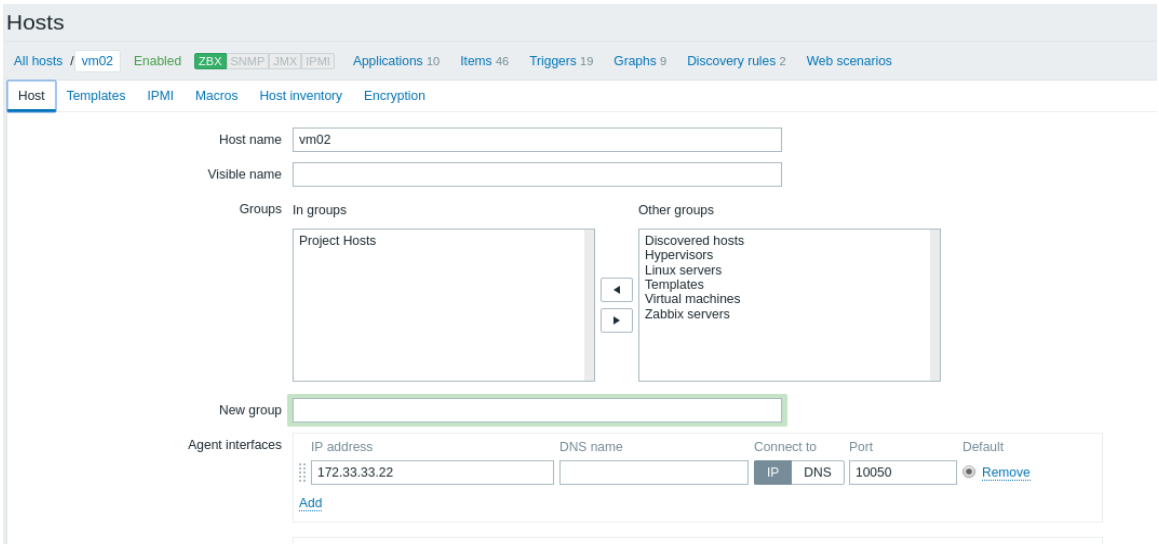


1. **Using Zabbix UI:**
    - Create User group “Project Owners”
    - User, assign user to “Project Owners”, set email

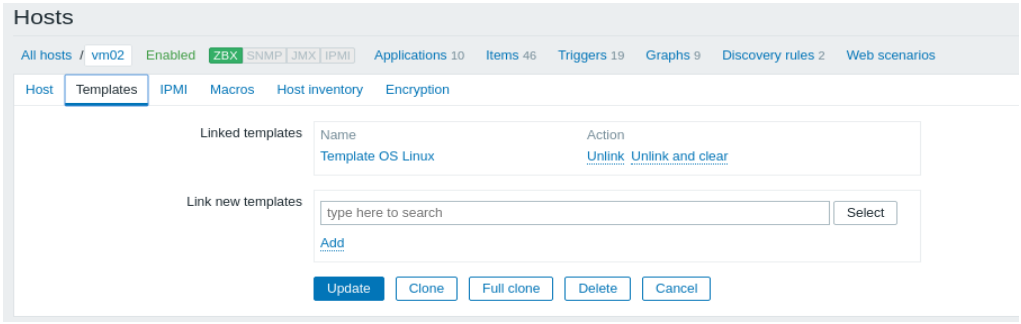


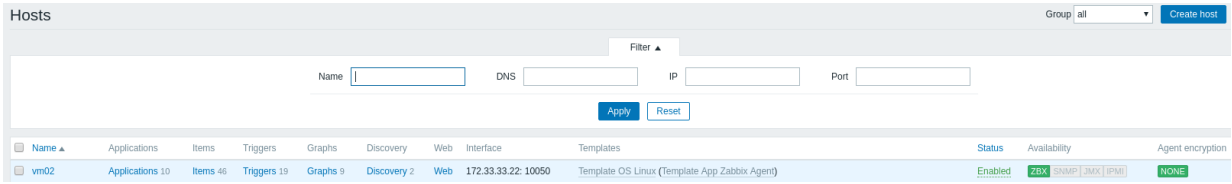


- Add 2nd VM to zabbix: create Host group (“Project Hosts”), create Host in this group, enable ZABBIX Agent monitoring

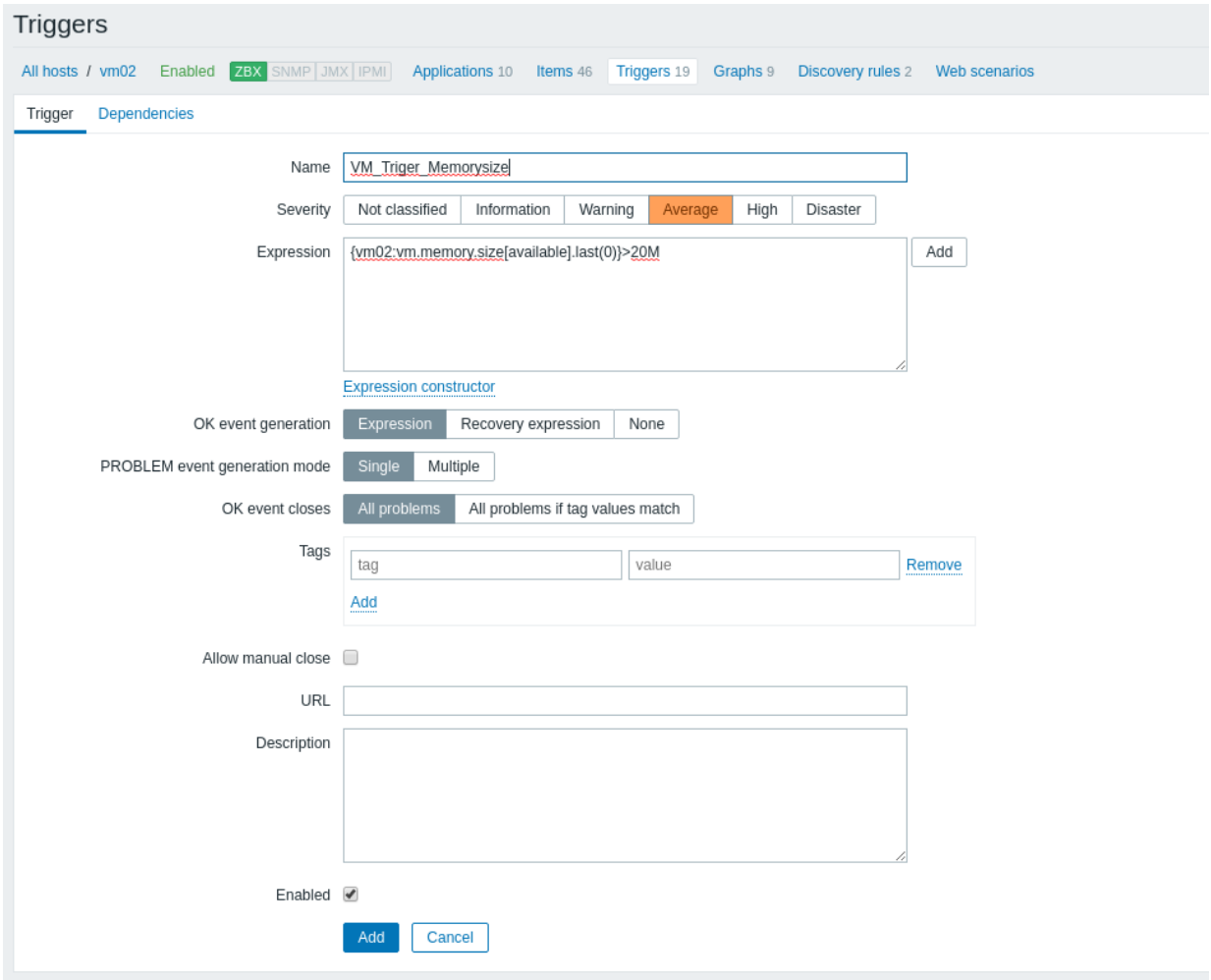


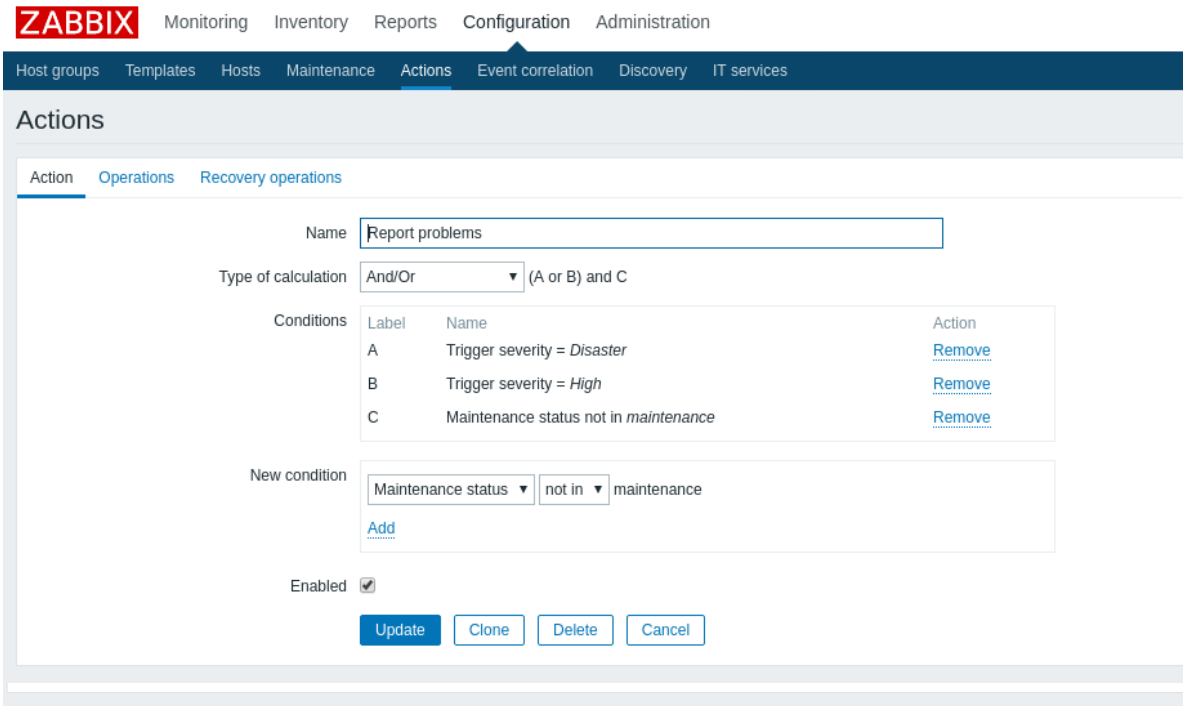
- Assign to this host template of Linux



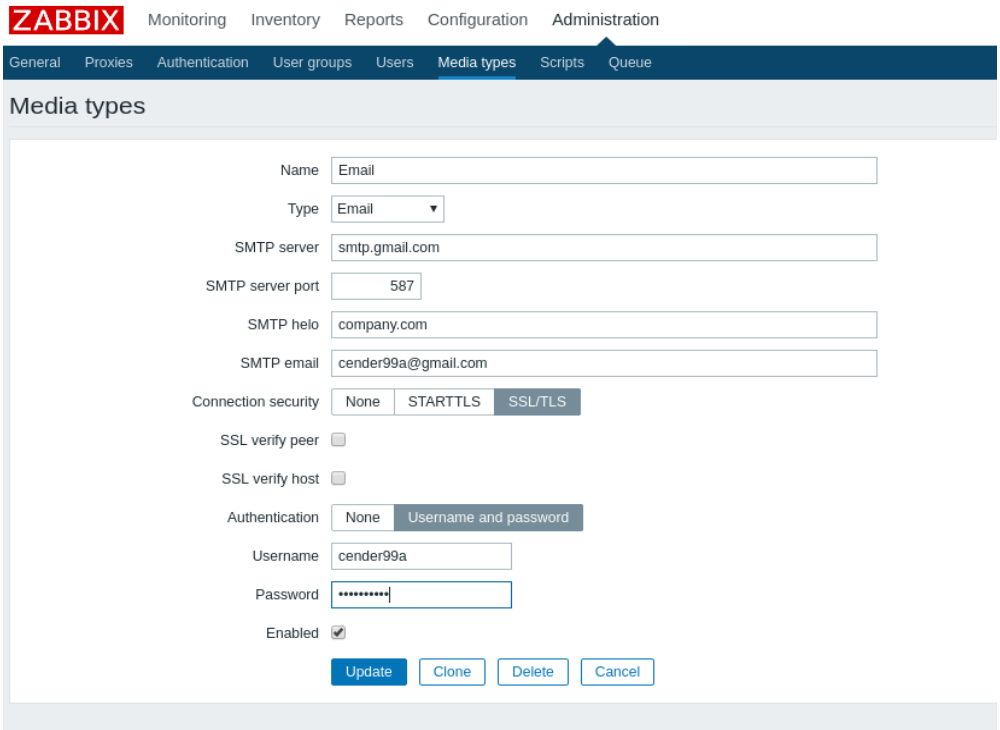


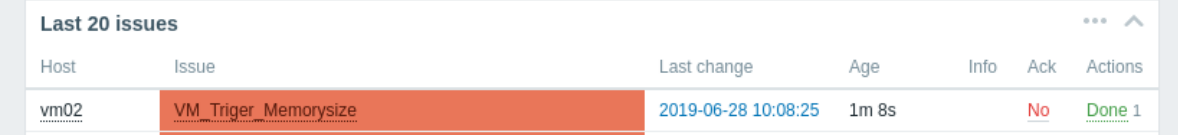
- Create custom checks (CPU Load, Memory load, Free space on file systems, Network load
- Create trigger with Severity HIGH, check if it works (Problem/Recovery)
- Create Action to inform “Project Owners” if HIGH triggers happen




ZABBIX
Monitoring
Inventory
Reports
Configuration
Administration
Host groups
Templates
Hosts
Maintenance
Actions
Event correlation
Discovery
IT services
Actions
Action
Operations
Recovery operations
Name
Report problems
Type of calculation
And/Or
(A or B) and C
Conditions
Label
Name
Action
A
Trigger severity = Disaster
Remove
B
Trigger severity = High
Remove
C
Maintenance status not in maintenance
Remove
New condition
Maintenance status
not in
maintenance
Add
Enabled
Update
Clone
Delete
Cancel

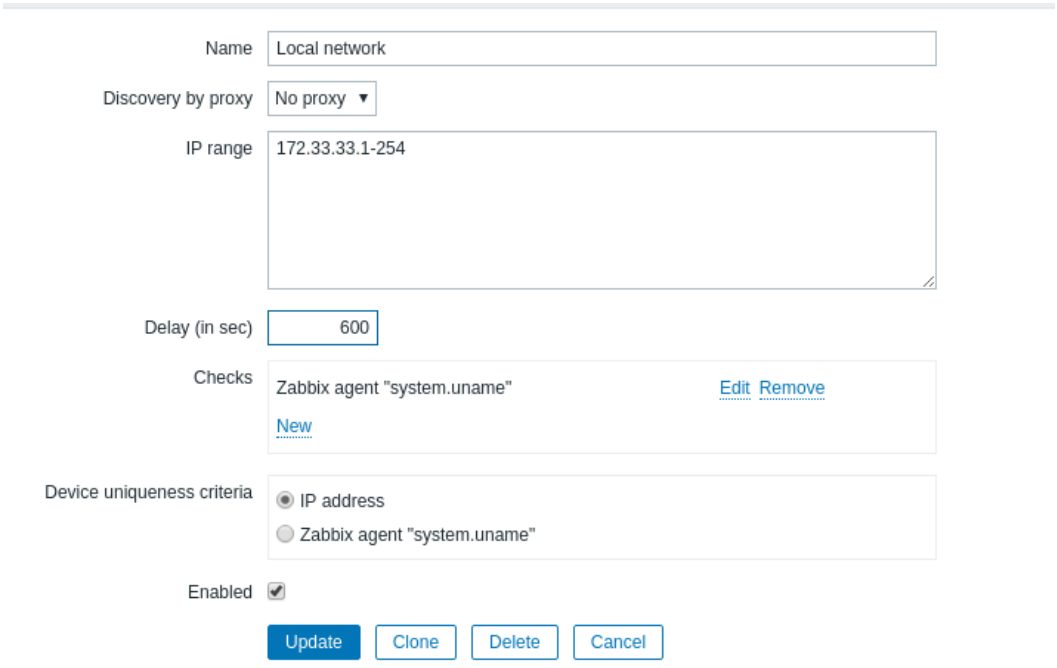

Name
Conditions
Operations
Status
Report problems
Maintenance status not in maintenance
Trigger severity = High
Trigger severity = Disaster
Send message to users: piotr (Piotr Lunev) via all media
Send message to user groups: Zabbix administrators via all media
Enabled

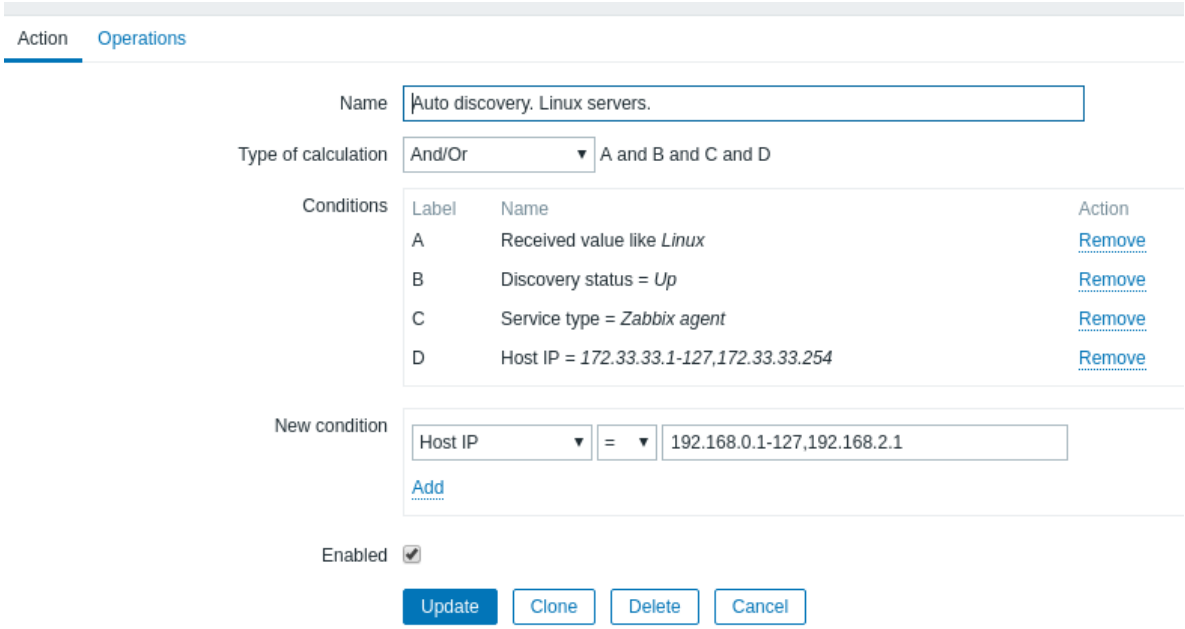

ZABBIX
Monitoring
Inventory
Reports
Configuration
Administration
General
Proxies
Authentication
User groups
Users
Media types
Scripts
Queue
Media types
Name
Email
Type
Email
SMTP server
smtp.gmail.com
SMTP server port
587
SMTP helo
company.com
SMTP email
cender99a@gmail.com
Connection security
None
STARTTLS
SSL/TLS
SSL verify peer
SSL verify host
Authentication
None
Username and password
Username
cender99a
Password
Enabled
Update
Clone
Delete
Cancel

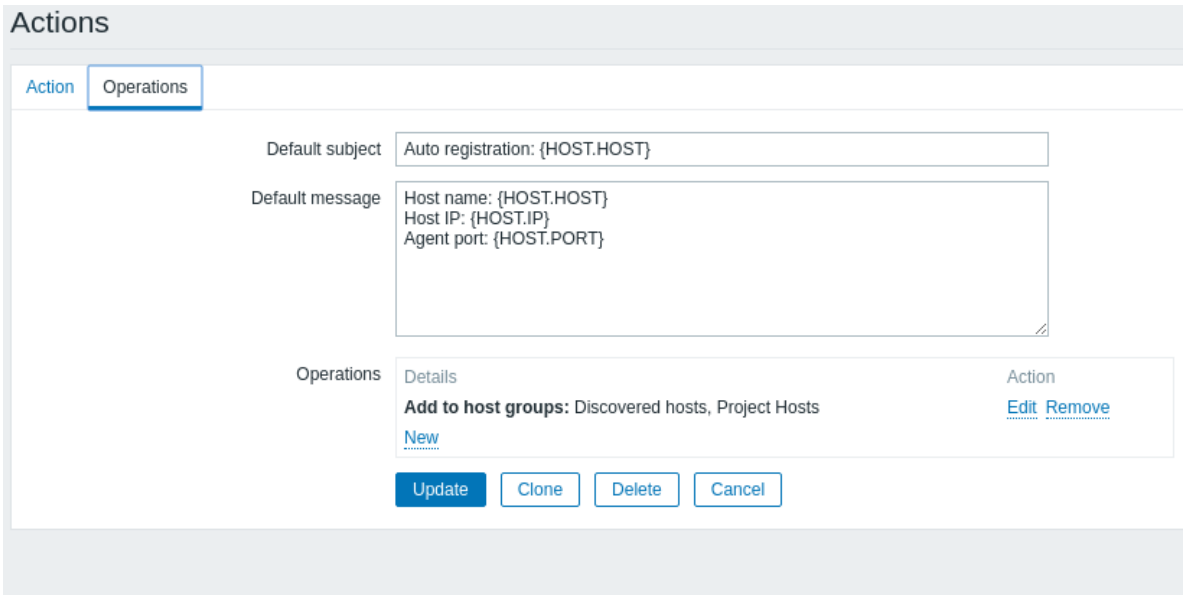


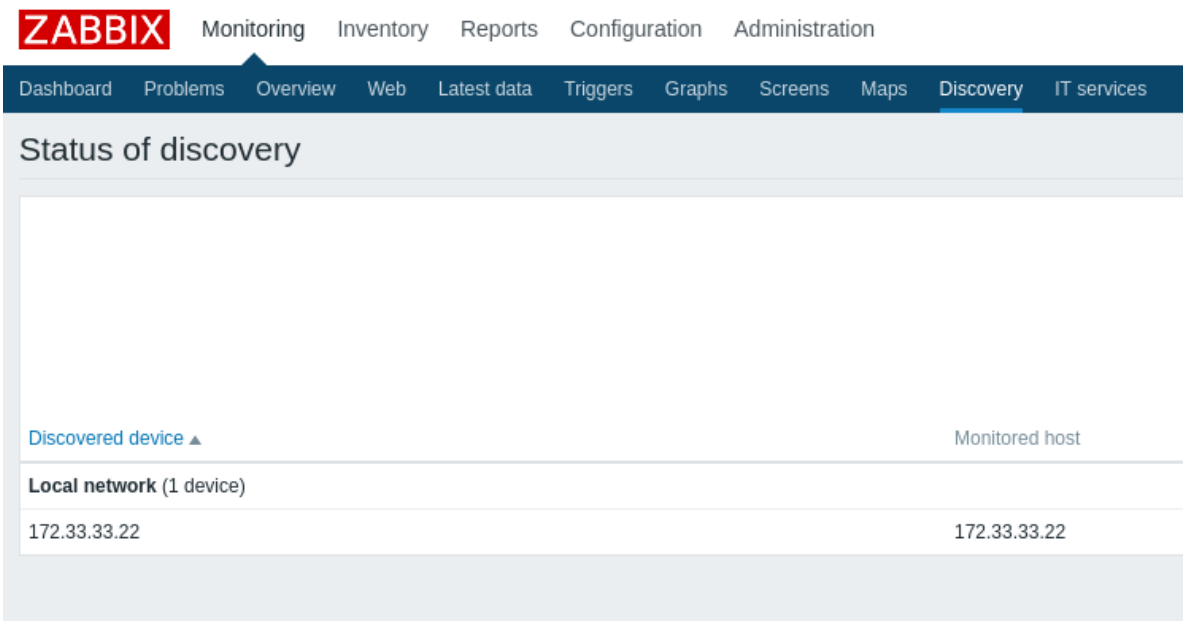
2. Using Zabbix UI:

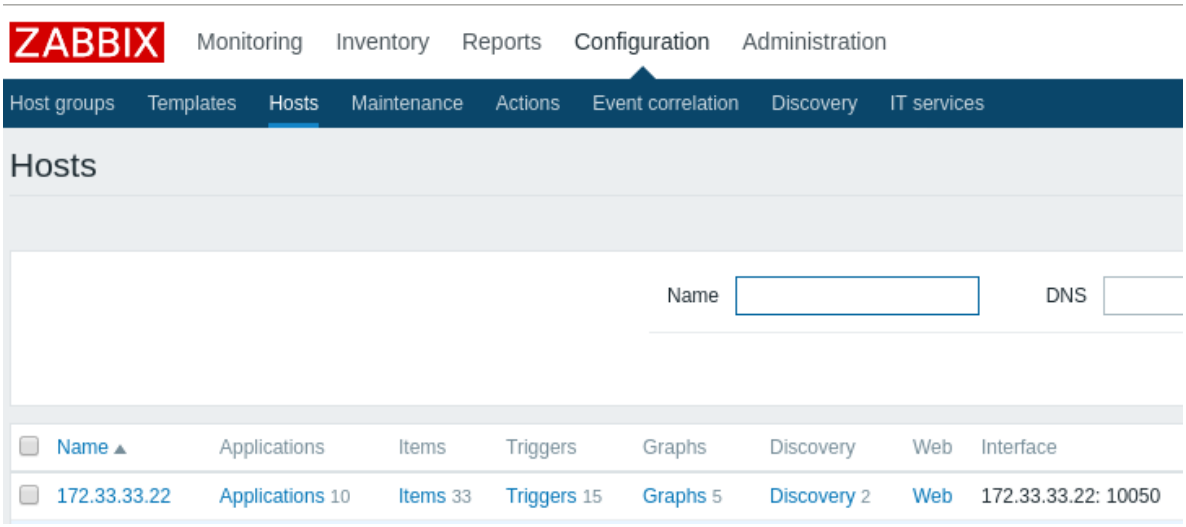
- Configure “Network discovery” so that, 2nd VM will be joined to Zabbix (group “Project Hosts”, Template “Template OS Linux”)




Action
Operations
Name
Auto discovery. Linux servers.
Type of calculation
And/Or
A and B and C and D
Conditions
Label
Name
Action
A
Received value like Linux
Remove
B
Discovery status = Up
Remove
C
Service type = Zabbix agent
Remove
D
Host IP = 172.33.33.1-127,172.33.33.254
Remove
New condition
Host IP
=
192.168.0.1-127,192.168.2.1
Add
Enabled
Update
Clone
Delete
Cancel

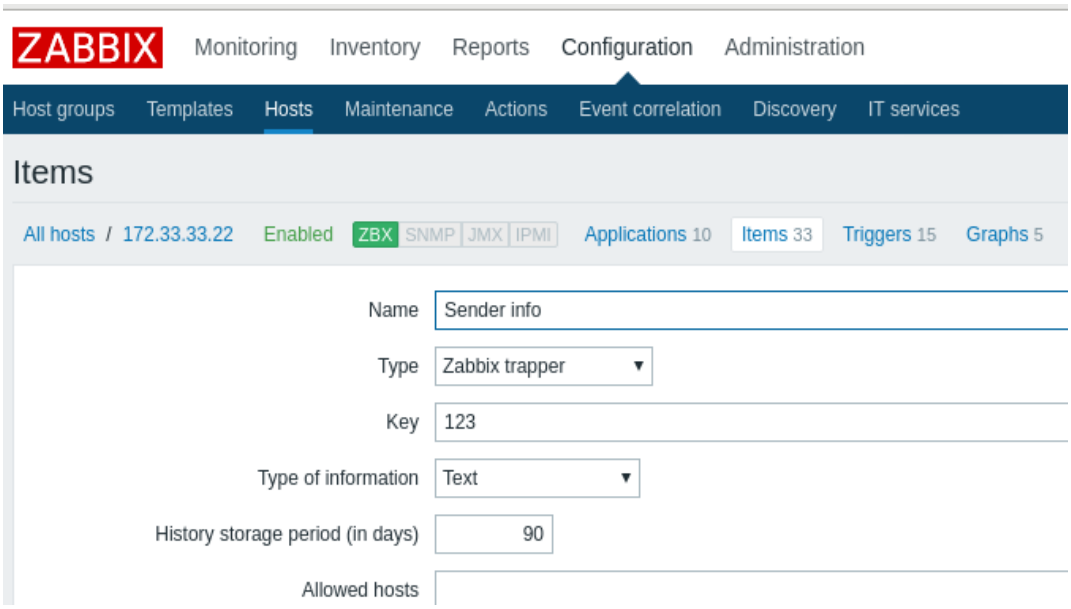

Actions
Action
Operations
Default subject
Auto registration: {HOST.HOST}
Default message
Host name: {HOST.HOST}
Host IP: {HOST.IP}
Agent port: {HOST.PORT}
Operations
Details
Action
Add to host groups: Discovered hosts, Project Hosts
Edit
Remove
New
Update
Clone
Delete
Cancel





Use zabbix_sender to send data to server manually (use zabbix_sender with key –vv for maximal verbosity).

Create item on zabbix server

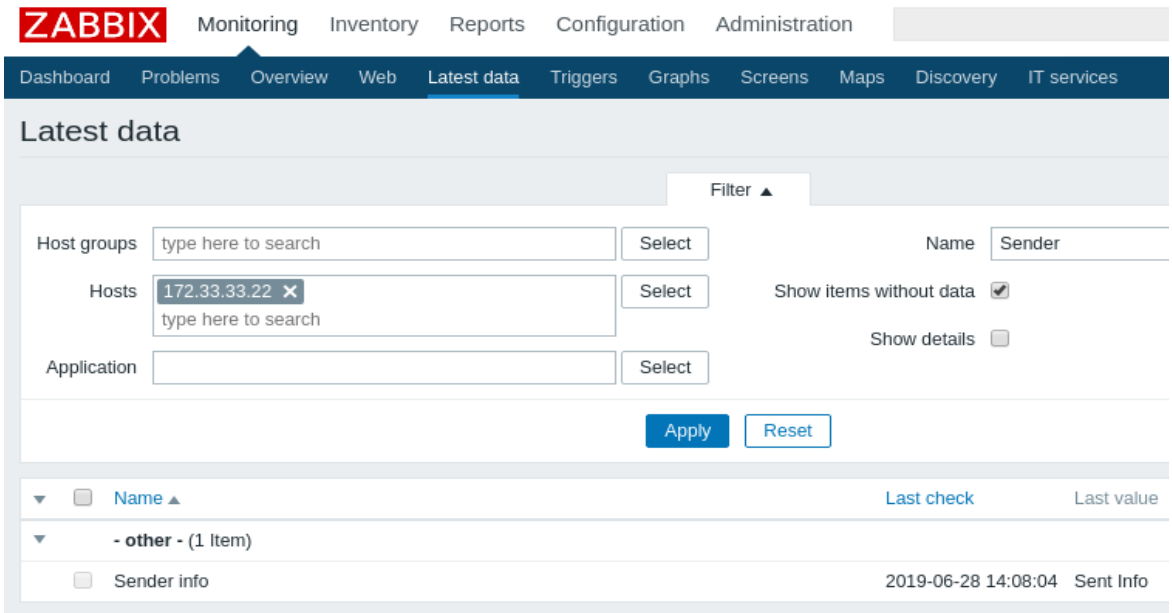


On agent use command

zabbix_sender -z 172.33.33.11 -s "172.33.33.22" -k 123 -o "Sent Info" -vv

```
[root@zabbix02 vagrant]# zabbix_sender -z 172.33.33.11 -s "172.33.33.22" -k 123 -o "Sent Info" -vv
zabbix_sender [4850]: DEBUG: answer [{"response":"success","info":"processed: 1; failed: 0; total: 1; seconds spent: 0.000028"}]
info from server: "processed: 1; failed: 0; total: 1; seconds spent: 0.000028"
sent: 1; skipped: 0; total: 1
```

And see information on server



Use zabbix_get as data receiver

```
[root@zabbix01 vagrant]# zabbix_get -s 172.33.33.22 -p 10050 -k 'system.cpu.load[all,avg1]'
0.000000
[root@zabbix01 vagrant]# zabbix_get -s 172.33.33.22 -p 10050 -k 'system.cpu.load[all,avg1]'
0.480000
```