EPAM Systems, RD Dep.

MTN.NIX.Zabbix_Java

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

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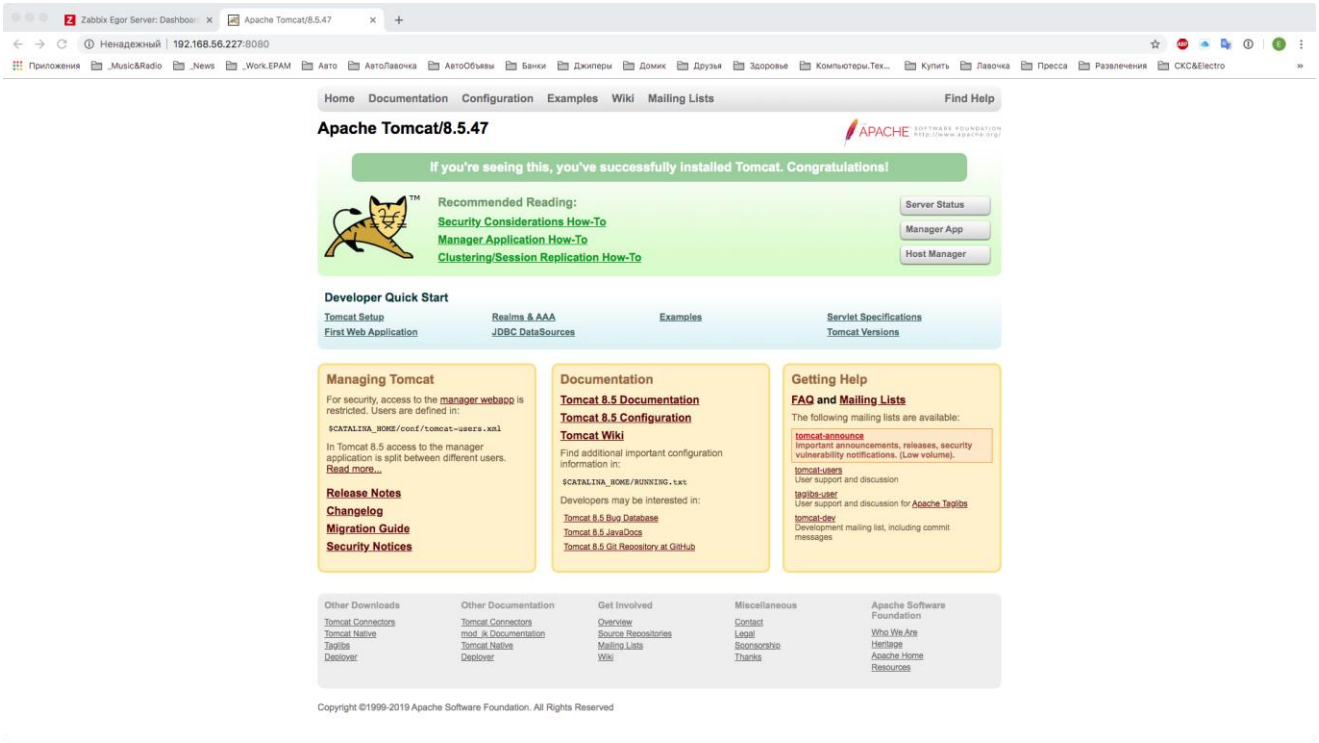
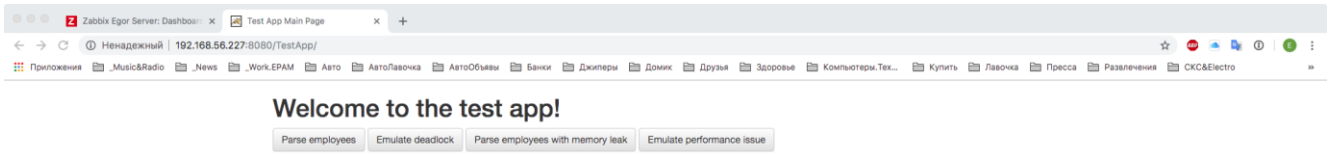
Task. Java Monitoring with Java

Task:

You should install and configure Zabbix server and agents.
Testing Infrastructure:
Vagrantfile to spin up 2 VMs (virtualbox):

- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner
- Install Tomcat 7 on 2nd VM



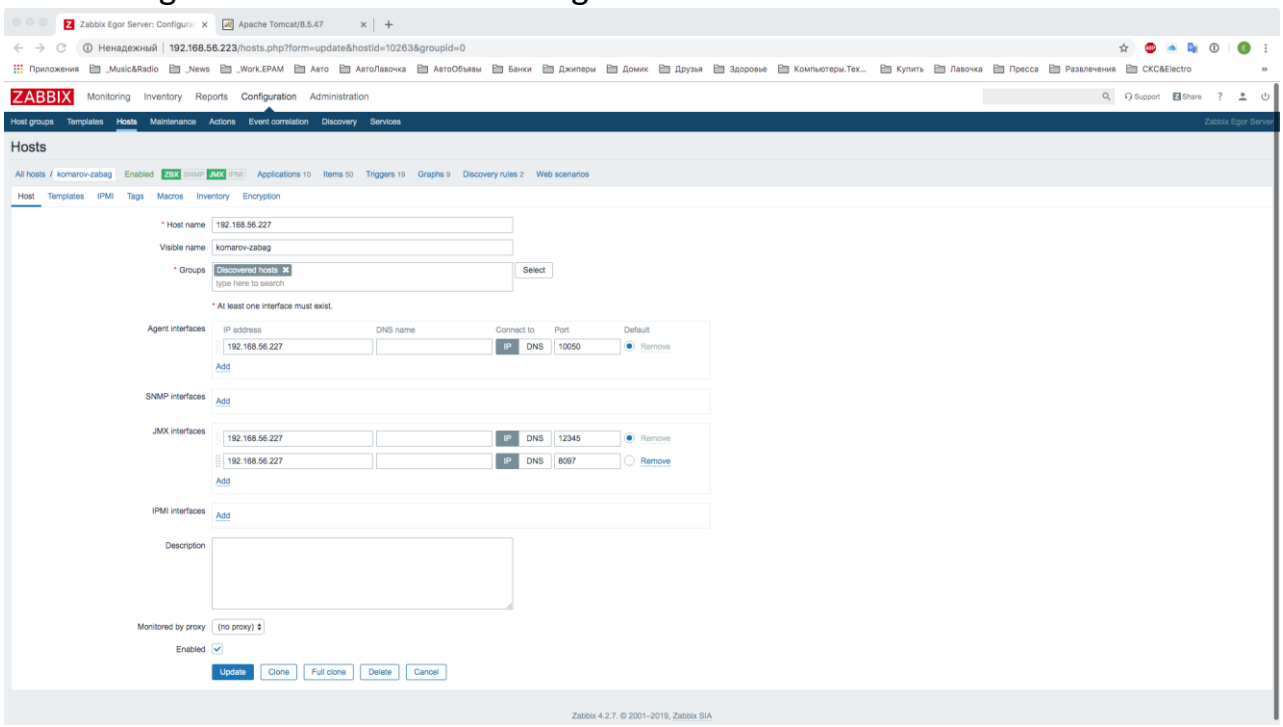


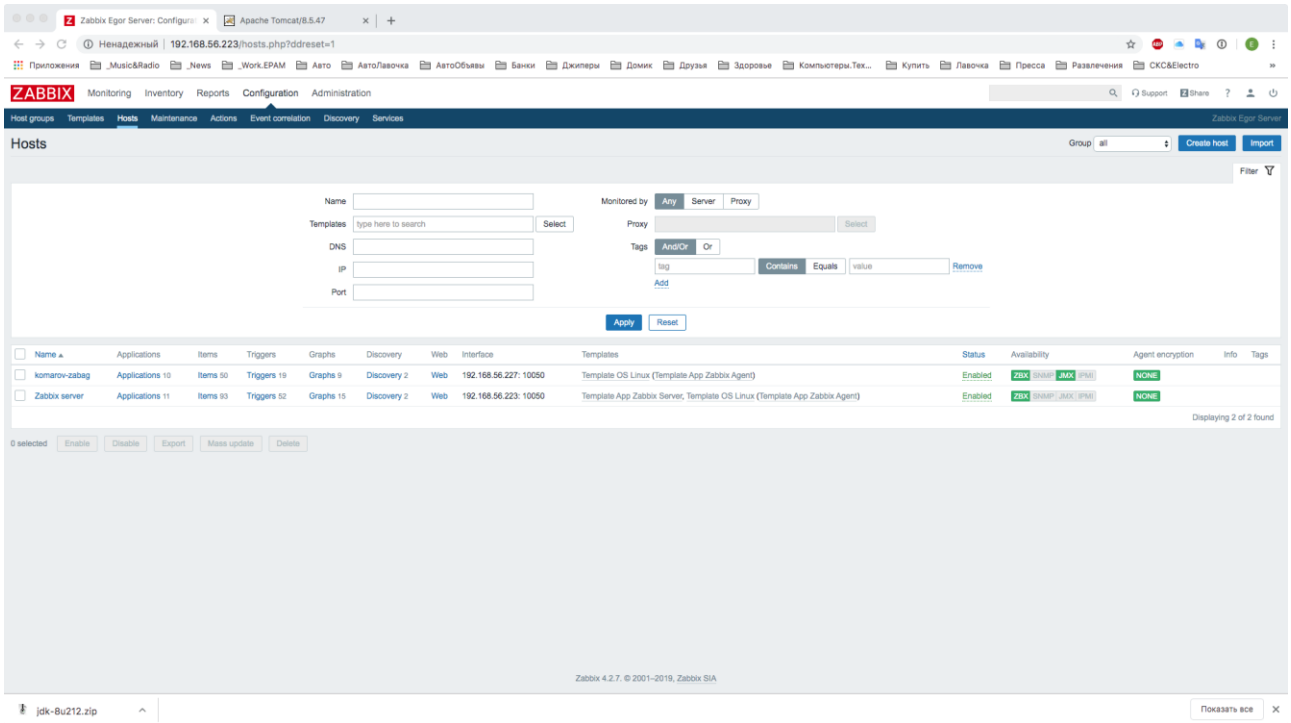
Other settings, Java GW install and configuration see on scripts.

Tasks:

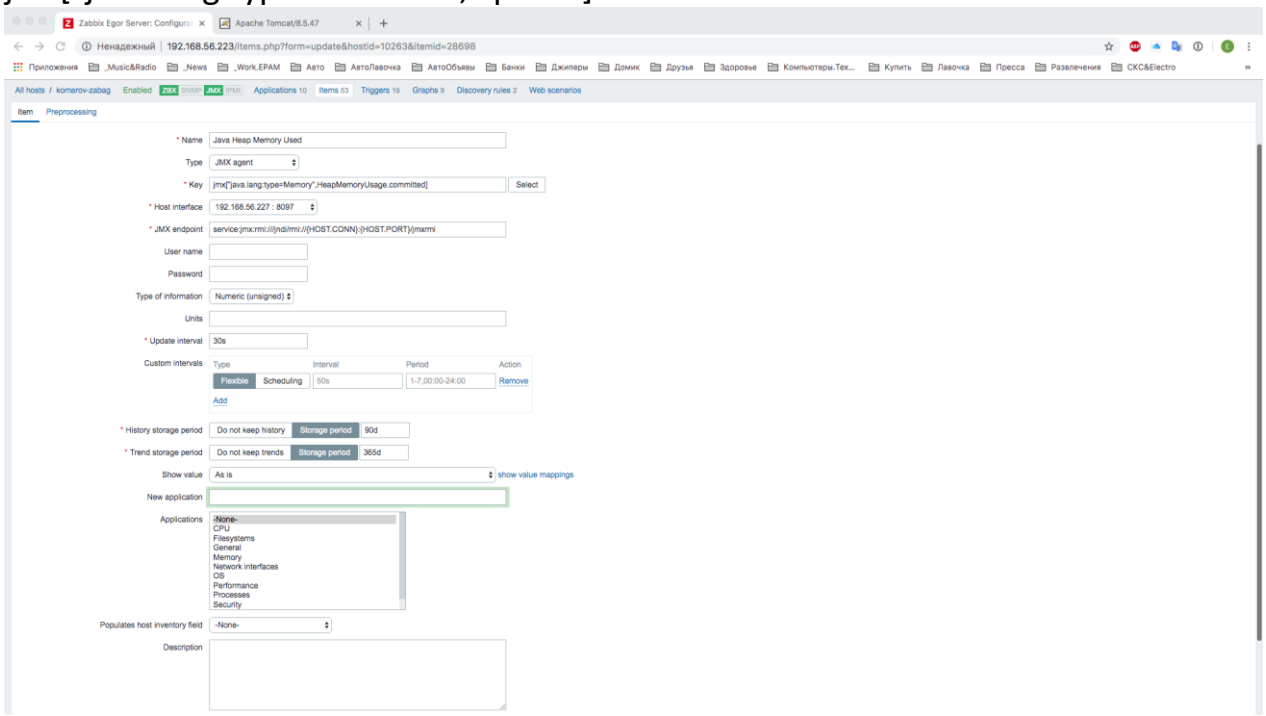
1. Configure Zabbix to examine Java parameters via Java Gateway (http://jmxmonitor.sourceforge.net/jmx.html)

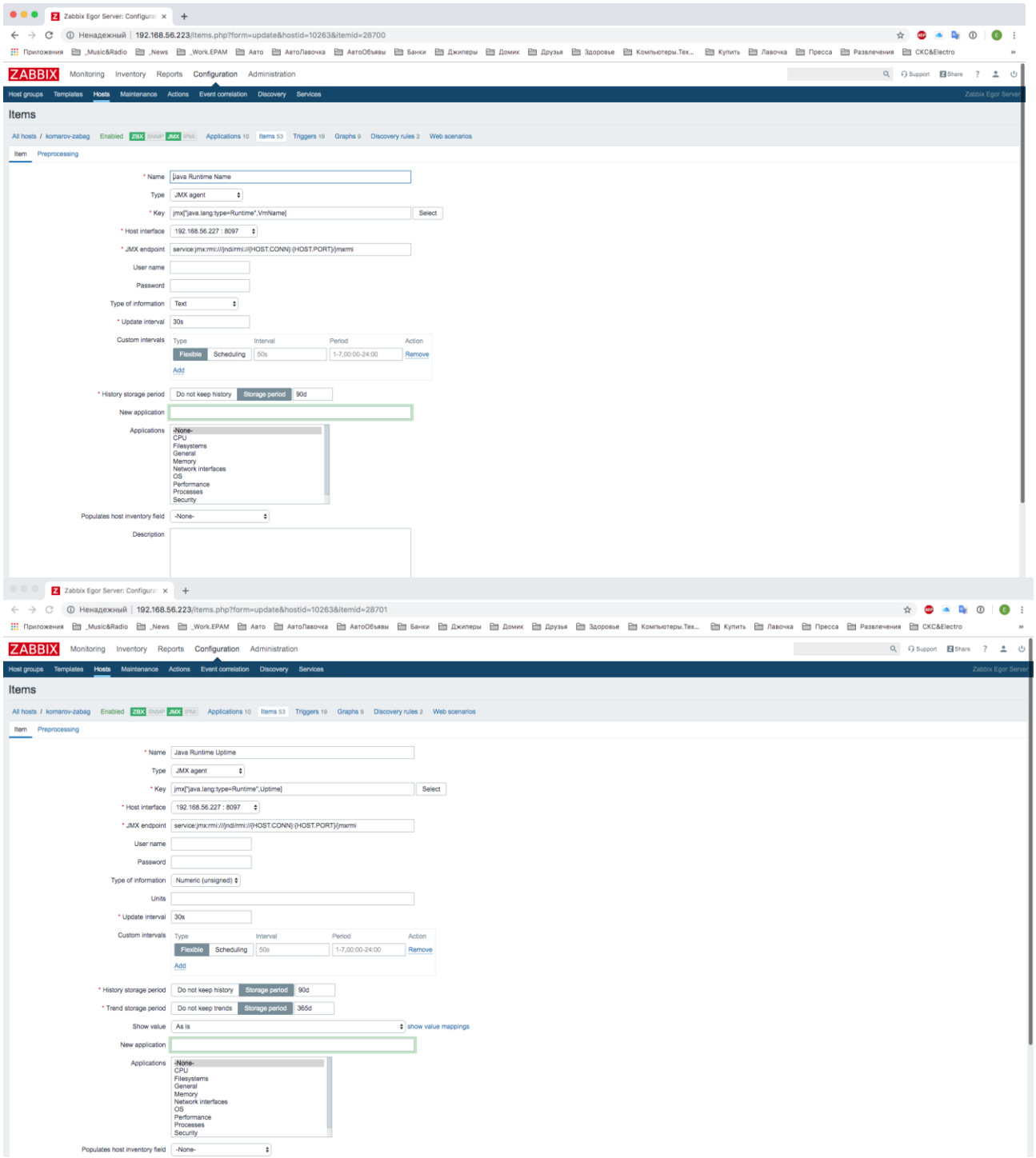
Let's configure JMX on komarov-zabag host:





Let’s configure item-parameters to observation:
jmx["java.lang:type=Memory",HeapMemoryUsage.committed]
jmx["java.lang:type=Runtime",VmVersion]
jmx["java.lang:type=Runtime",VmName]
jmx["java.lang:type=Runtime",Uptime]

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Ненадежный | 192.168.56.223/items.php?form=update&hostid=10263&itemid=28700
ZABBIX
Monitoring
Inventory
Reports
Configuration
Administration
Host groups
Templates
Hosts
Maintenance
Actions
Event correlation
Discovery
Services
Items
All hosts / komarov-zabag
Enabled
Applications 10
Items 53
Triggers 19
Graphs 9
Discovery rules 2
Web scenarios
Item
Preprocessing
* Name
Java Runtime Name
Type
JMX agent
* Key
jmx["java.lang:type=Runtime",VmName]
Select
* Host interface
192.168.56.227 : 8097
* JMX endpoint
service:jmx:rmi:///jndi/rmi://{HOST.CONN}:{HOST.PORT}/jmxrmi
User name
Password
Type of information
Text
* Update interval
30s
Custom intervals
Type
Interval
Period
Action
Flexible
Scheduling
50s
1-7,00:00-24:00
Remove
Add
* History storage period
Do not keep history
Storage period
90d
New application
Applications
-None-
CPU
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Memory
Network interfaces
OS
Performance
Processes
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-None-
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Zabbix Egor Server: Configura
Ненадежный | 192.168.56.223/items.php?form=update&hostid=10263&itemid=28701
ZABBIX
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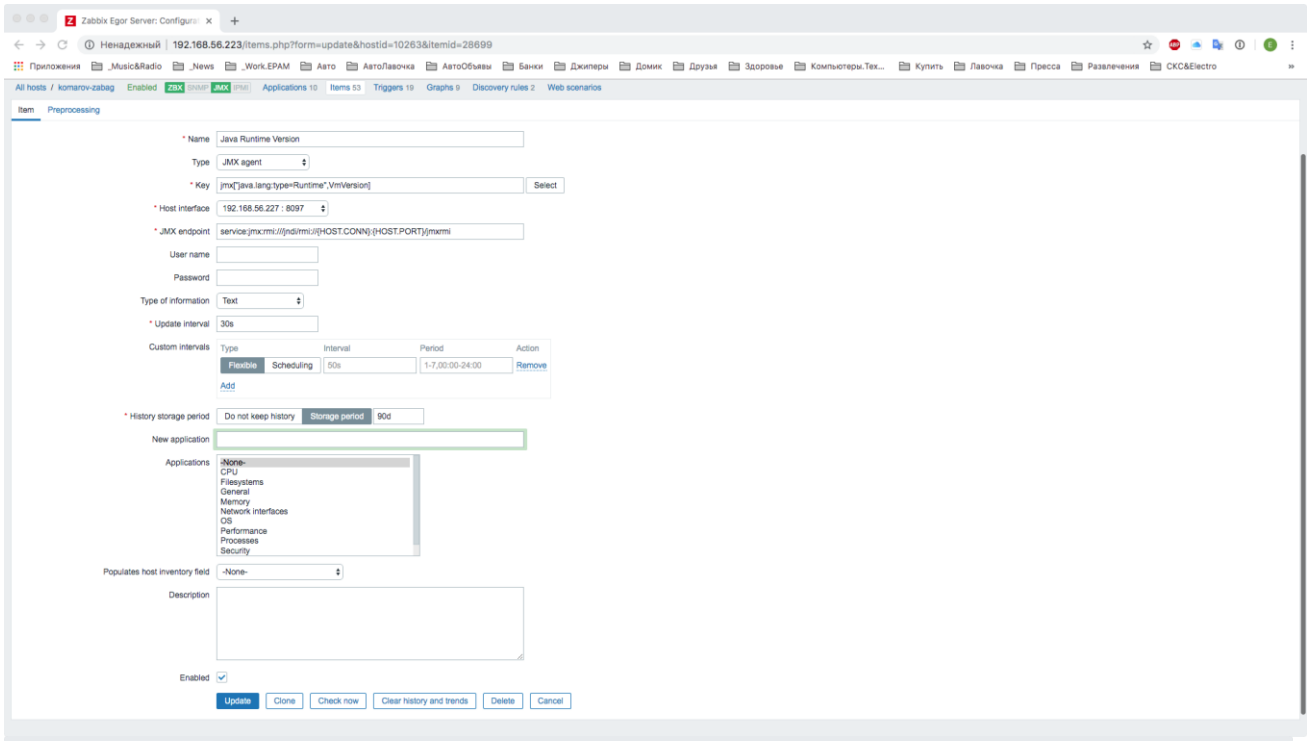
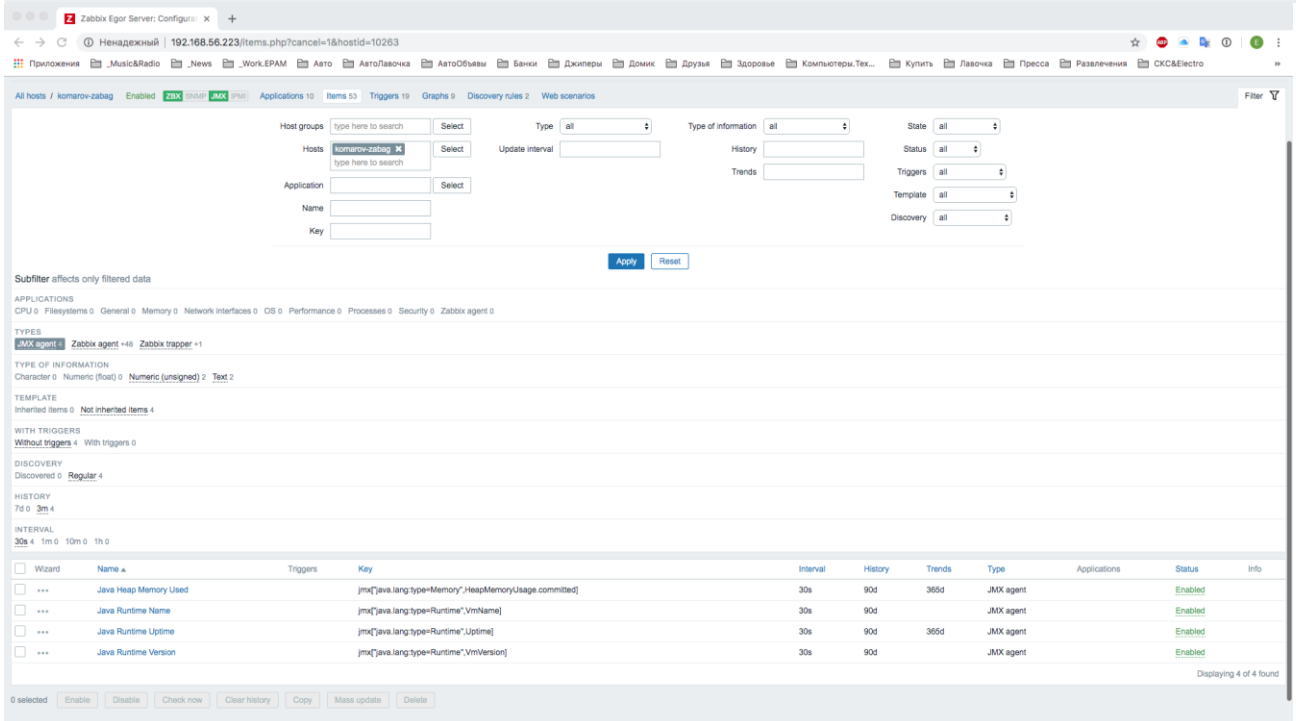
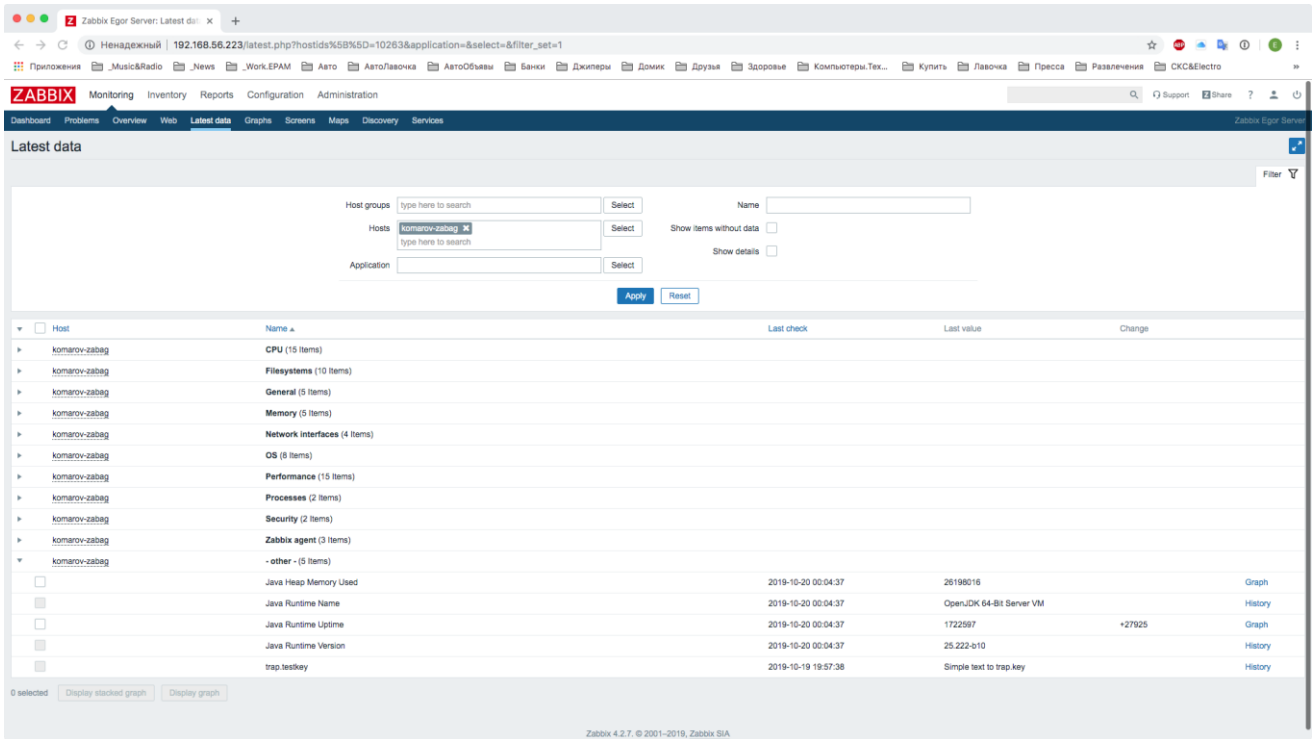
Discovery rules 2
Web scenarios
Item
Preprocessing
* Name
Java Runtime Uptime
Type
JMX agent
* Key
jmx["java.lang:type=Runtime",Uptime]
Select
* Host interface
192.168.56.227 : 8097
* JMX endpoint
service:jmx:rmi:///jndi/rmi://{HOST.CONN}:{HOST.PORT}/jmxrmi
User name
Password
Type of information
Numeric (unsigned)
Units
* Update interval
30s
Custom intervals
Type
Interval
Period
Action
Flexible
Scheduling
50s
1-7,00:00-24:00
Remove
Add
* History storage period
Do not keep history
Storage period
90d
* Trend storage period
Do not keep trends
Storage period
365d
Show value
As is
show value mappings
New application
Applications
-None-
CPU
Filesystems
General
Memory
Network interfaces
OS
Performance
Processes
Security
Populates host inventory field
-None-



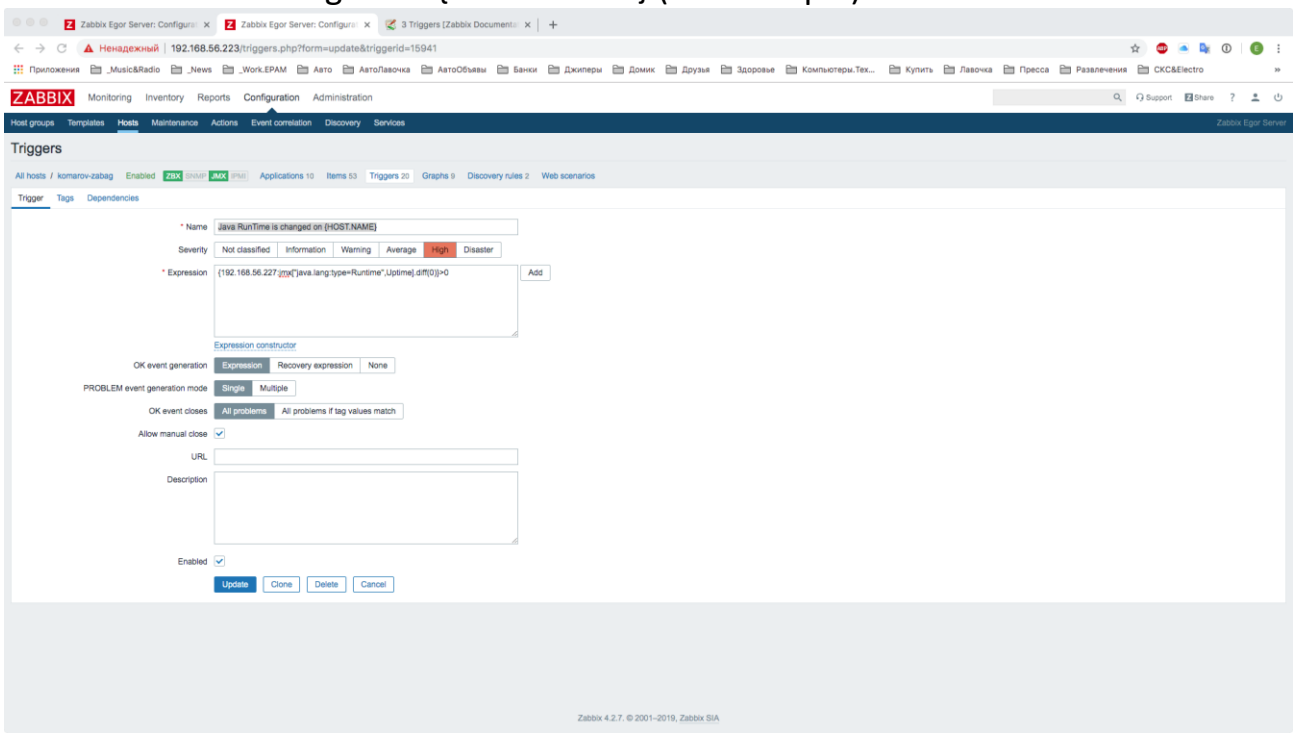


See data from komarov-zabag host:

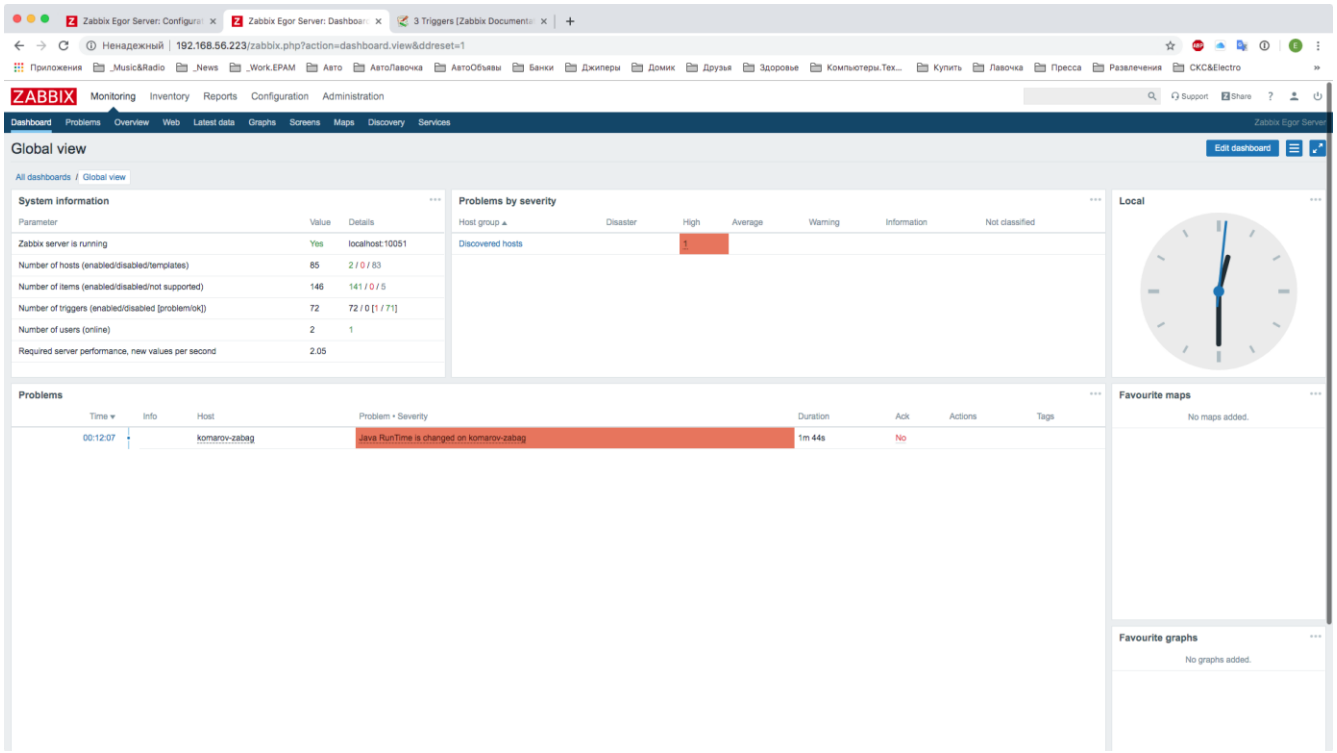


2. Configure triggers to alert once these parameters changed.

Java RunTime is changed on {HOST.NAME} (for example):



See the trigger configured:



For both VMs use vagrant box “sbeliakou/centos-7.3-x86_64-minimal”