Task. Java Monitoring with Java

Task:

You should install and configure Zabbix server and agents.

Testing Infrastructure:

Vagrantfile to spin up 2 VMs (virtualbox):

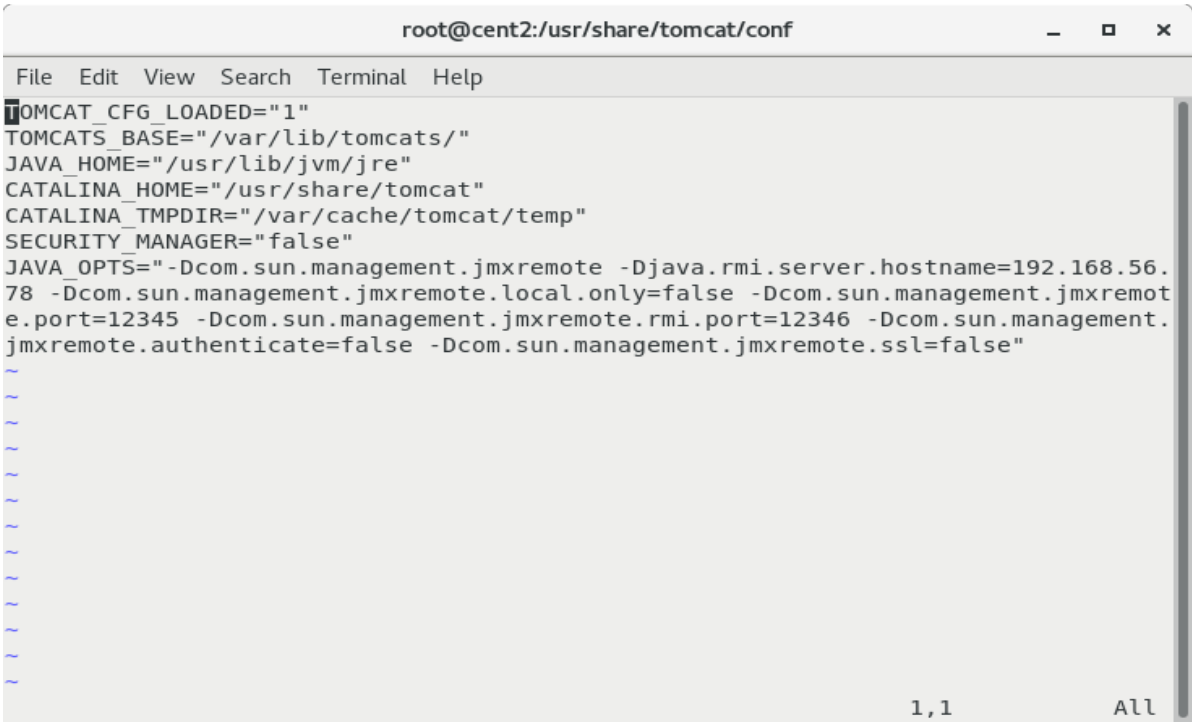
- zabbix server, provisioned by Vagrant provisioner

- Zabbix agents on both VMs, provisioned by Vagrant provisioner

- Install Tomcat 7 on 2nd VM

Tasks:

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



root@cent1:/etc/zabbix/web

File Edit View Search Terminal Help

```
LogFile=/var/log/zabbix/zabbix_server.log
LogFileSize=0
PidFile=/var/run/zabbix/zabbix_server.pid
SocketDir=/var/run/zabbix
DBHost=localhost
DBName=zabbix
DBUser=zabbix
DBPassword=zabbix123
JavaGateway=192.168.56.77
JavaGatewayPort=10052
StartJavaPollers=5
SNMPTrapperFile=/var/log/snmptrap/snmptrap.log
Timeout=4
AlertScriptsPath=/usr/lib/zabbix/alertscripts
ExternalScripts=/usr/lib/zabbix/externalscripts
LogSlowQueries=3000
StatsAllowedIP=127.0.0.1
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                                                    1,1           All
```
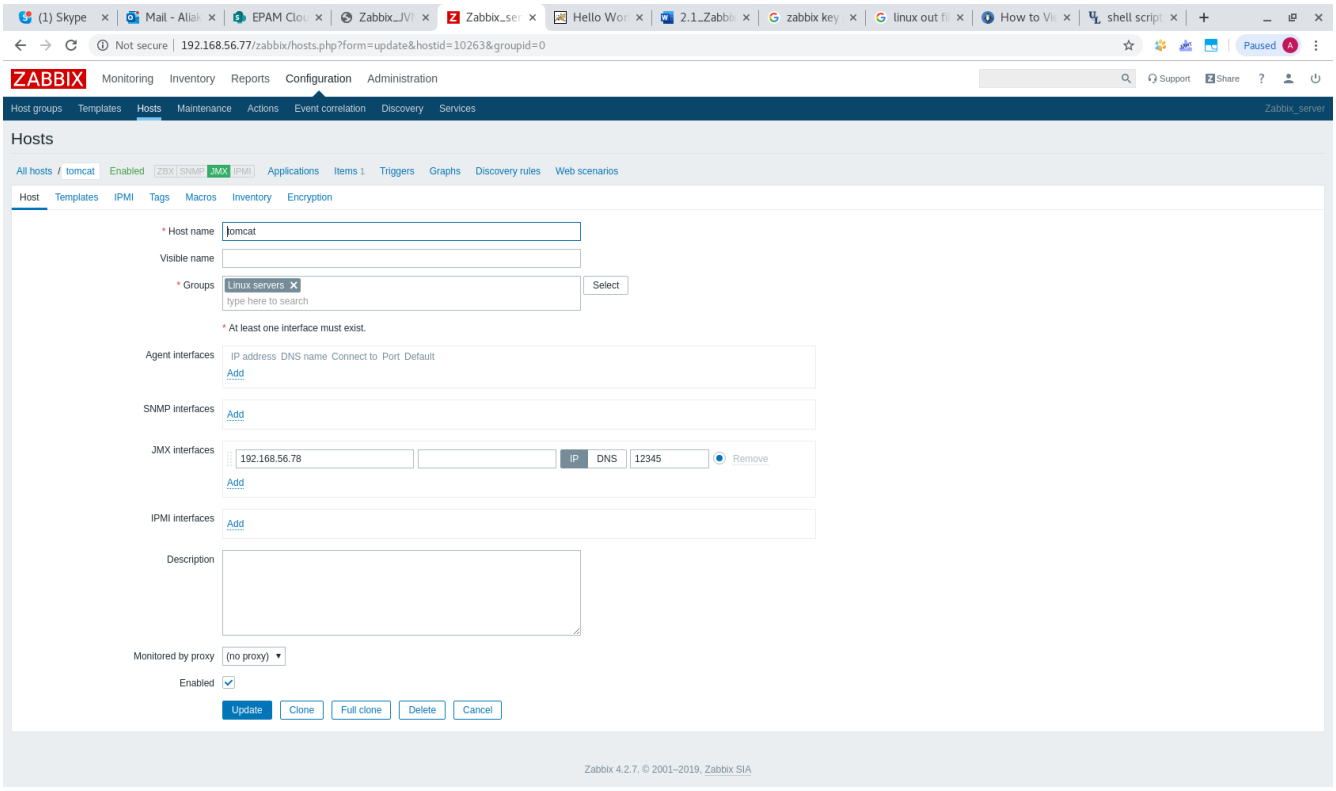
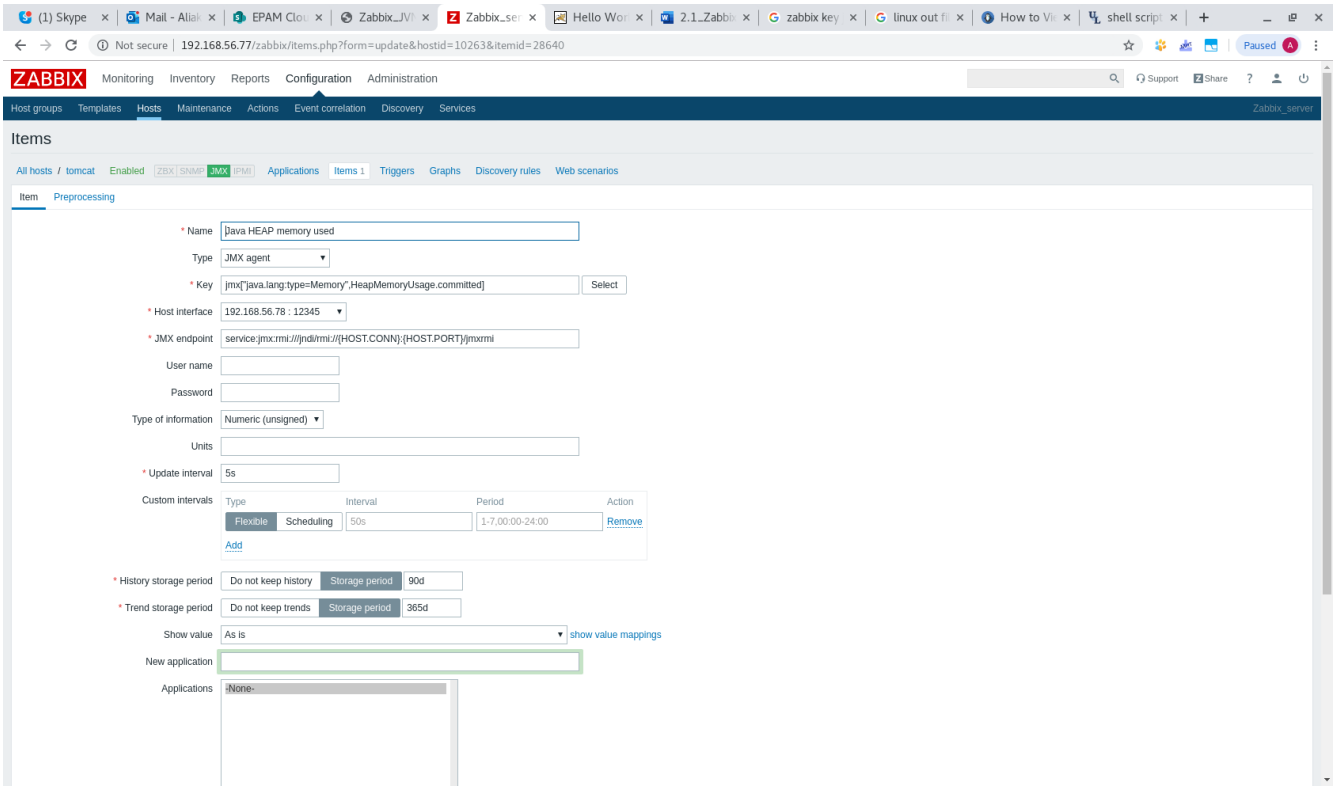
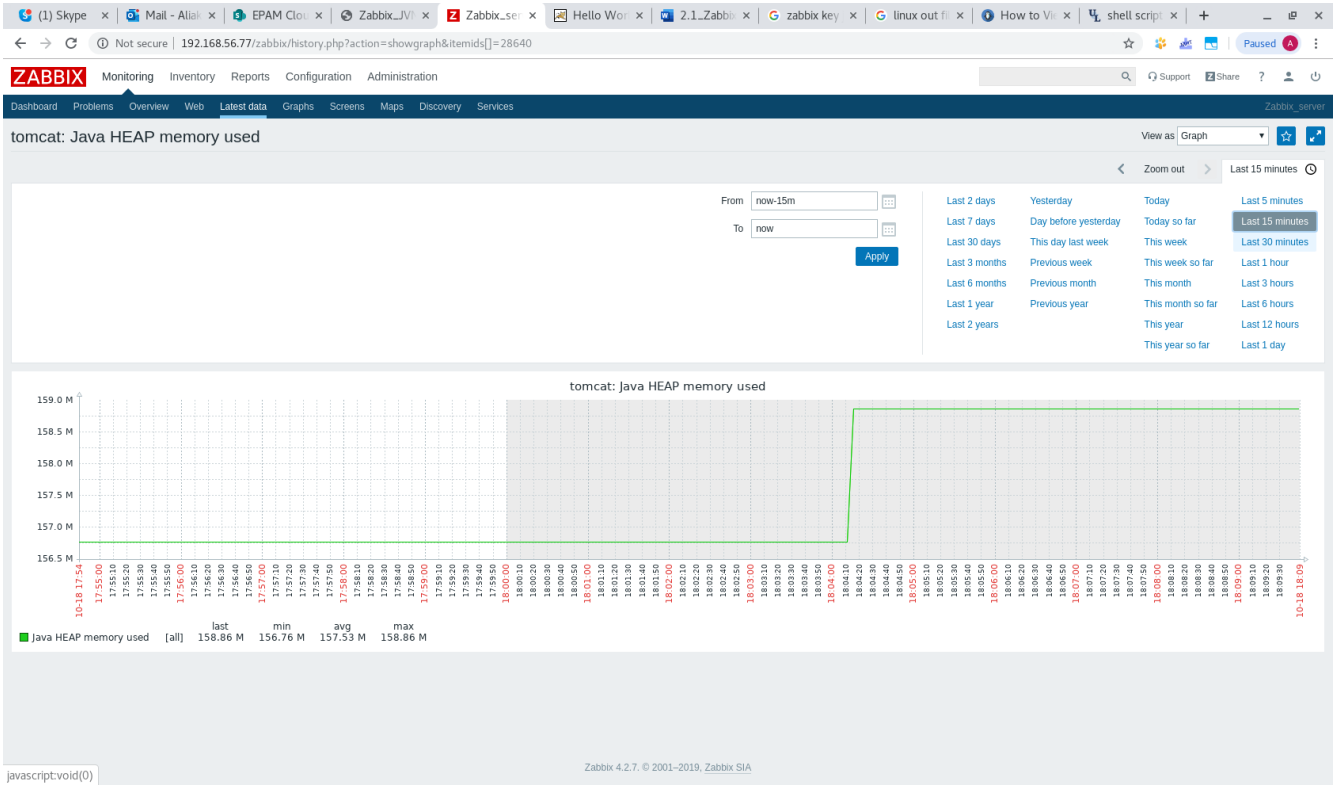
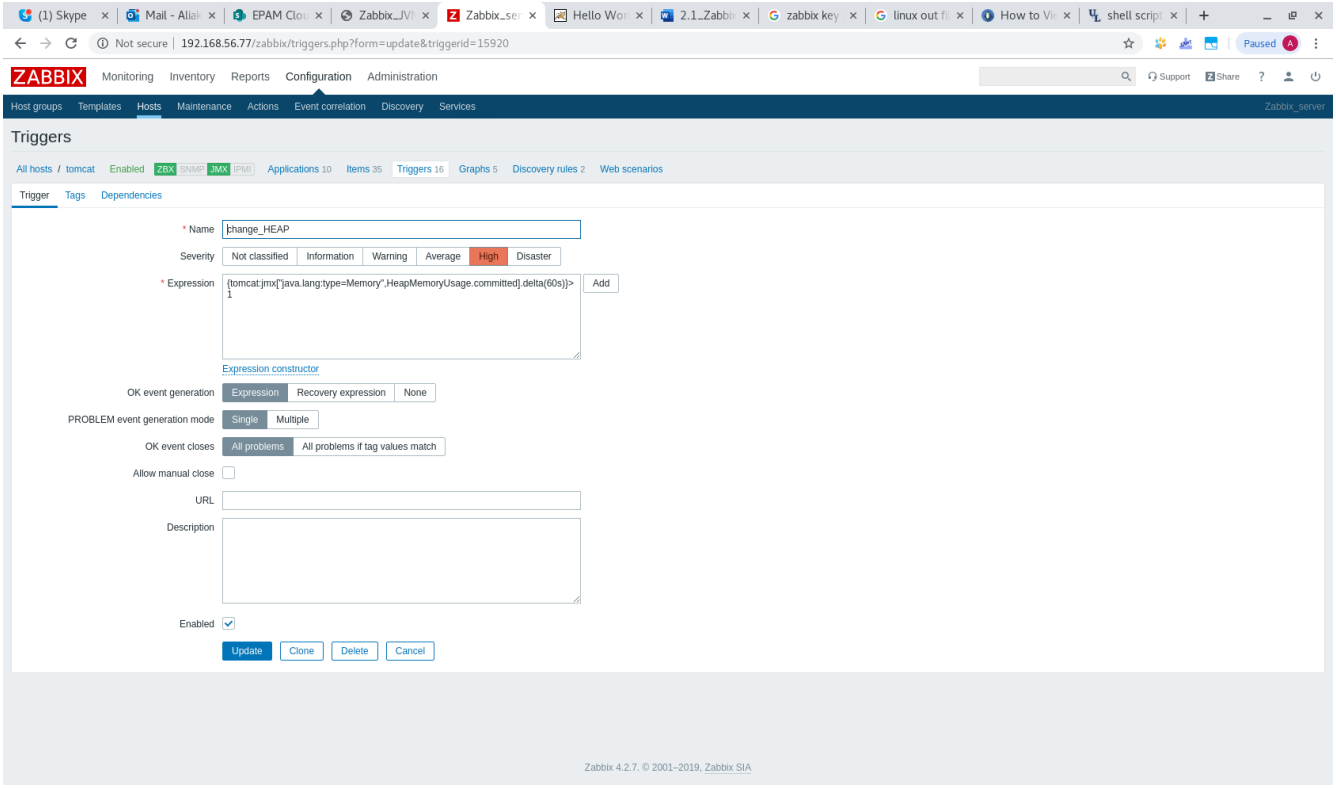
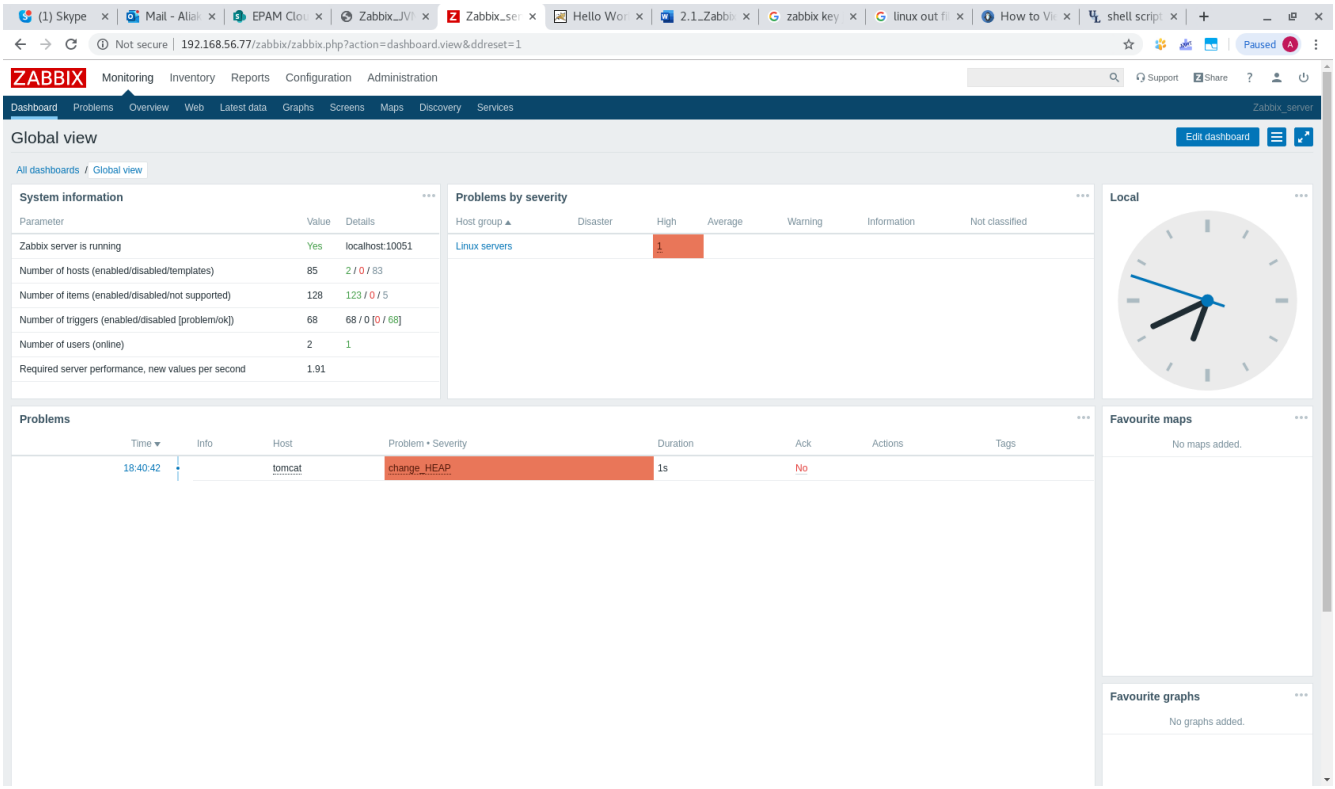




ZABBIX
Monitoring Inventory Reports Configuration Administration
Host groups Templates Hosts Maintenance Actions Event correlation Discovery Services
Items
All hosts / tomcat Enabled ZBX SNMP JMX IPMI Applications Items 1 Triggers Graphs Discovery rules Web scenarios
Item Preprocessing
* Name Java HEAP memory used
Type JMX agent
* Key jmx["java.lang:type=Memory",HeapMemoryUsage.committed] Select
* Host interface 192.168.56.78 : 12345
* JMX endpoint service:jmx:rmi:///jndi/rmi://{HOST.CONN}:{HOST.PORT}/jmxrmi
User name
Password
Type of information Numeric (unsigned)
Units
* Update interval 5s
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-


ZABBIX
Monitoring Inventory Reports Configuration Administration
Dashboard Problems Overview Web Latest data Graphs Screens Maps Discovery Services
tomcat: Java HEAP memory used
View as Graph
Zoom out Last 15 minutes
From now-15m
To now
Apply
Last 2 days Yesterday Today Last 5 minutes
Last 7 days Day before yesterday Today so far Last 15 minutes
Last 30 days This day last week This week Last 30 minutes
Last 3 months Previous week This week so far Last 1 hour
Last 6 months Previous month This month Last 3 hours
Last 1 year Previous year This month so far Last 6 hours
Last 2 years This year Last 12 hours
This year so far Last 1 day
tomcat: Java HEAP memory used
159.0 M
158.5 M
158.0 M
157.5 M
157.0 M
156.5 M
last min avg max
Java HEAP memory used [all] 158.86 M 156.76 M 157.53 M 158.86 M
Zabbix 4.2.7. © 2001–2019, Zabbix SIA
javascript:void(0)

2. Configure triggers to alert once these parameters changed.





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