Task. Web Monitoring with Zabbix

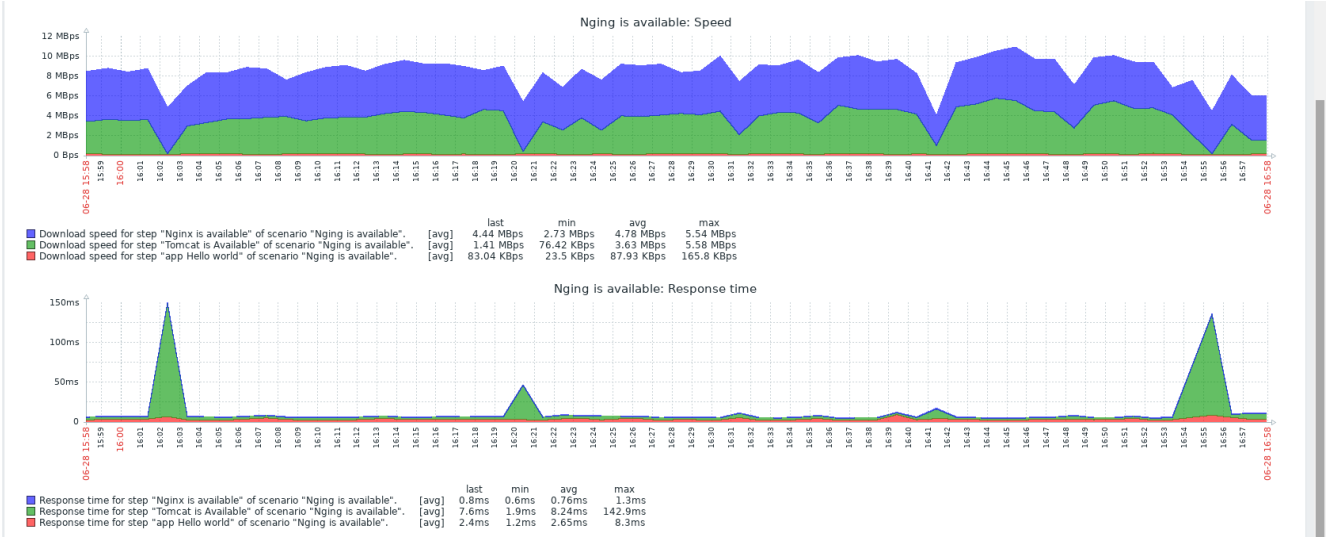
Testing Infrastructure:

Vagrantfile to spin up 2 VMs (virtualbox):

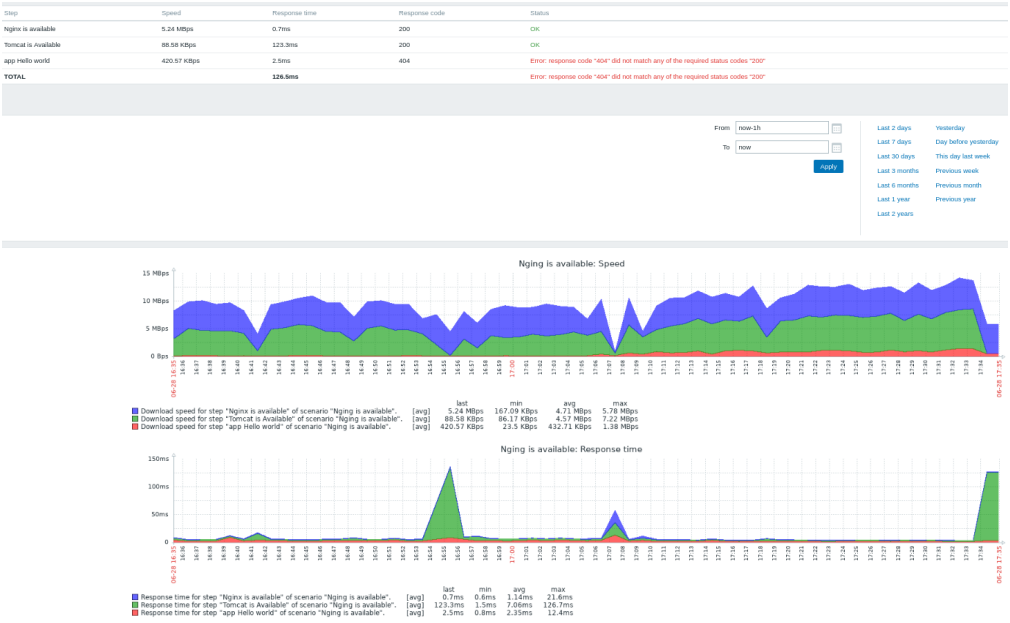
- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner
- Install Tomcat 7 on 2nd VM, deploy any “hello world” application

Tasks:

1. Configure WEB check:
    - Scenario to test Tomcat availability as well as Application heath



2. Configure Triggers to alert once WEB resources become unavailable



Task. Java Monitoring with Java

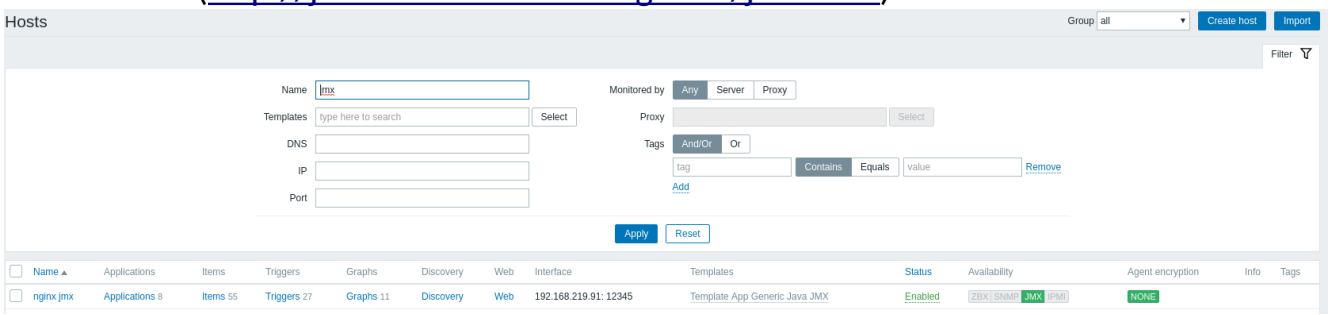
Task:

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

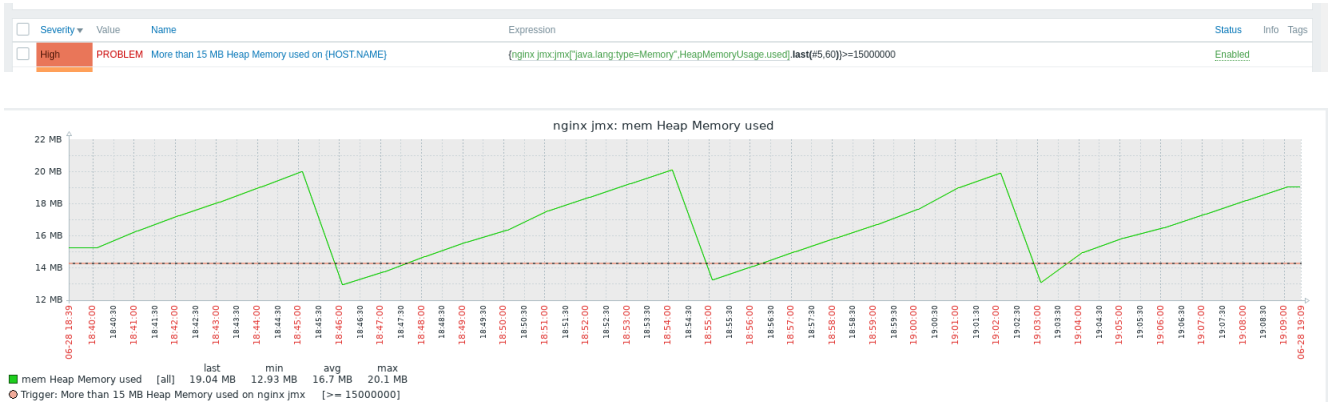
- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner
- Install Tomcat 7 on 2nd VM

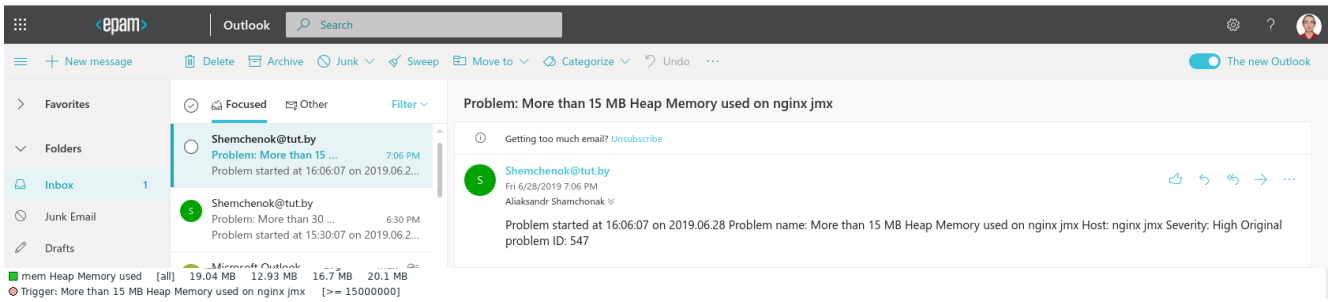
Tasks:

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



Configure triggers to alert once these parameters changed.





Task. Zabbix API

Task:

You should develop a script (on Python 2.x) which registers given host in Zabbix.

Testing Infrastructure:

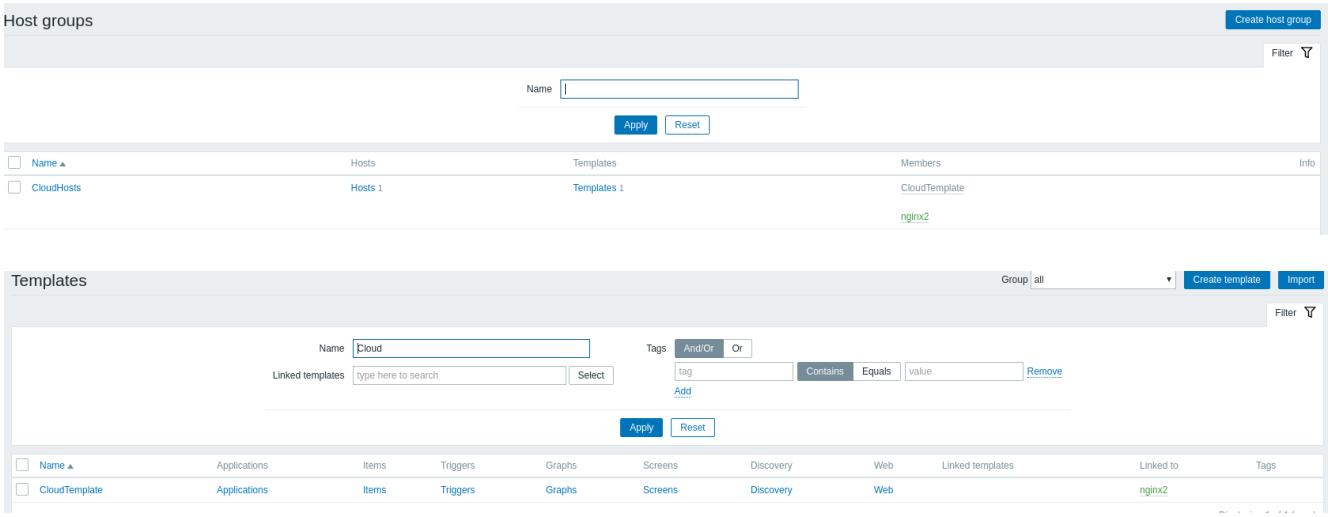
Vagrantfile to spin up 2 VMs (virtualbox):

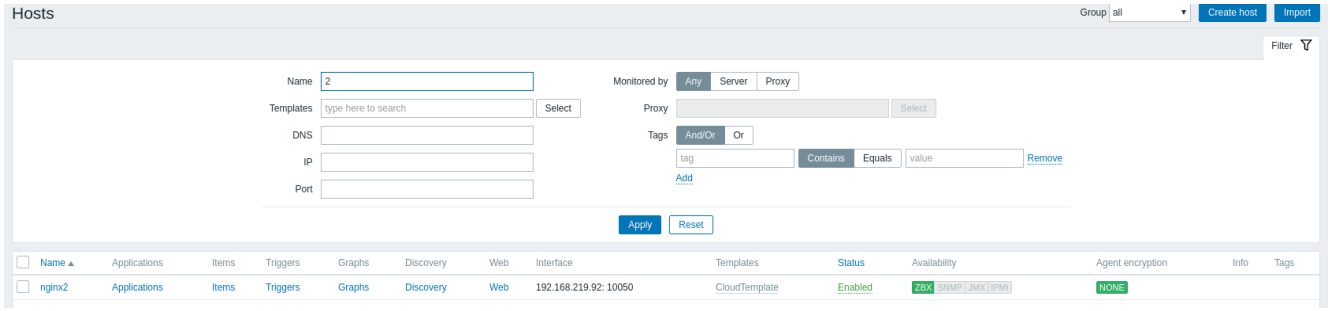
- zabbix server, provisioned by Vagrant provisioner
- Linux VM with zabbix agent, script for registration on zabbix server, all provisioned by Vagrant provisioner

Registering Script requirements:

Written on Python 2.x
Starts at VM startup or on provision phase
Host registered in Zabbix server should have Name = Hostname (not IP)
Host registered in Zabbix server should belong to ”CloudHosts” group
Host registered in Zabbix server should be linked with Custom template
This script should create group “CloudHosts” id it doesn’t exist

```
    nginx2:     Running setup.py install for simplejson: finished with status 'done'
    nginx2: Successfully installed certifi-2019.6.16 chardet-3.0.4 idna-2.8 requests-2.22.0
 simplejson-3.16.0 urllib3-1.25.3
    nginx2: You are using pip version 8.1.2, however version 19.1.1 is available.
    nginx2: You should consider upgrading via the 'pip install --upgrade pip' command.
    nginx2: New host nginx2 (192.168.219.92) was sucessfully registered.
(zabbix) [student@EPBYMINW5961 zabbix1]$
```




Hosts
Group all
Create host
Import
Filter
Name 2
Templates type here to search
Select
DNS
IP
Port
Monitored by Any Server Proxy
Proxy
Select
Tags And/Or Or
tag Contains Equals value Remove
Add
Apply
Reset
Name ▲ Applications Items Triggers Graphs Discovery Web Interface Templates Status Availability Agent encryption Info Tags
nginx2 Applications Items Triggers Graphs Discovery Web 192.168.219.92: 10050 CloudTemplate Enabled ZBX SNMP JMX IPMI NONE