

EPAM Systems, RD Dep., RD Dep.

# MTN.NIX.05.Zabbix.API

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. Zabbix API

### Task:

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

### Testing Infrastructure:

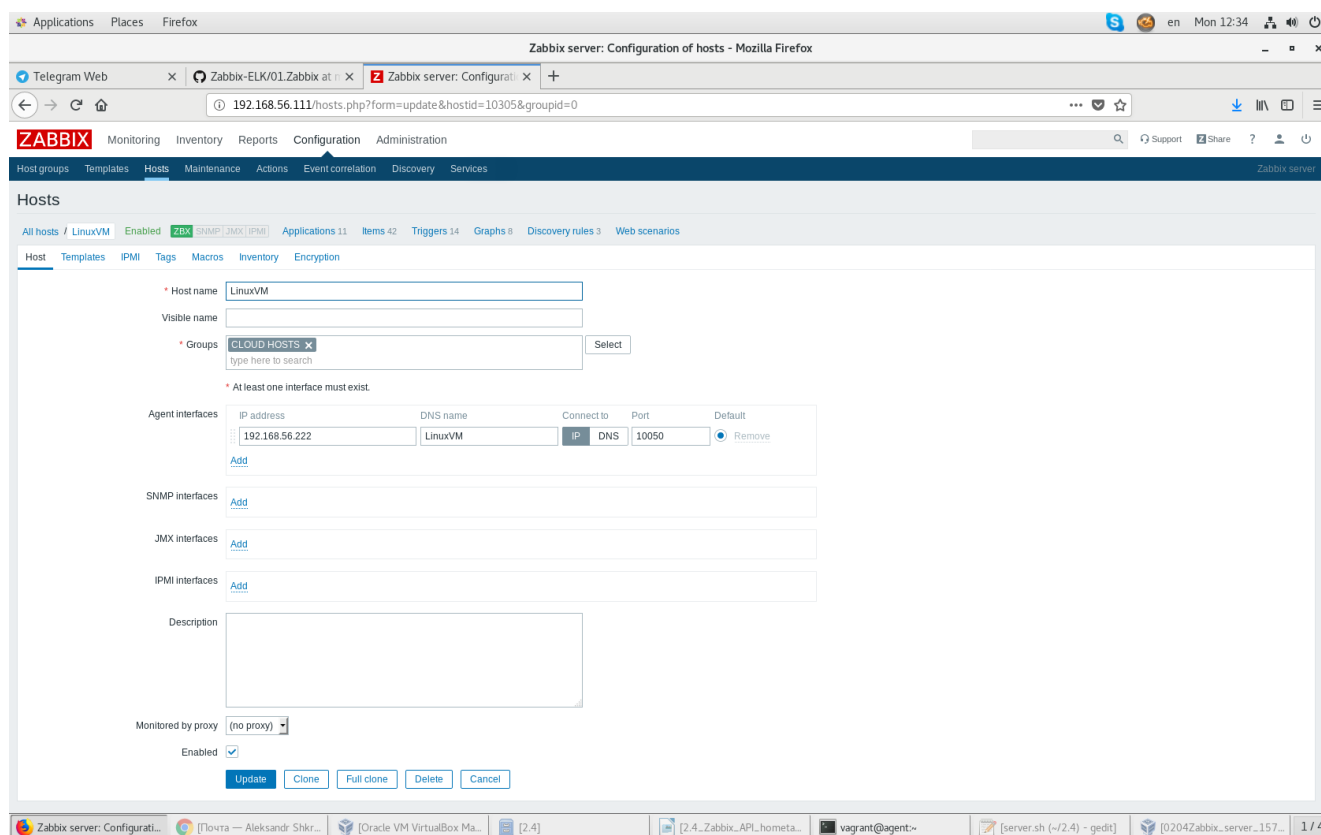
Vagrantfile to spin up 2 VMs (virtualbox):

- 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

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



Applications Places Firefox

Zabbix server: Configuration of hosts - Mozilla Firefox

Telegram Web x Zabbix-ELK/01.Zabbix at x Zabbix server: Configurati x +

192.168.56.111/hosts.php?ddreset=1

**ZABBIX** Monitoring Inventory Reports Configuration Administration

Host groups Templates **Hosts** Maintenance Actions Event correlation Discovery Services

Hosts Group: all Create host Import

Filter

Name:  Monitored by: Any Server Proxy

Templates:  type here to search Select

DNS:

IP:

Port:

Proxy:  Select

Tags: AndOr Or tag Contains Equals value Remove Add

Apply Reset

<input type="checkbox"/>	Name	Applications	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
<input type="checkbox"/>	LinuxVM	Applications 11	Items 42	Triggers 14	Graphs 8	Discovery 3	Web	192.168.56.222:10050		Template OS Linux by Zabbix agent (Template Module Linux block devices by Zabbix agent, Template Module Linux CPU by Zabbix agent, Template Module Linux filesystems by Zabbix agent, Template Module Linux generic by Zabbix agent, Template Module Linux memory by Zabbix agent, Template Module Linux network interfaces by Zabbix agent, Template Module Zabbix agent)	Enabled	ZBX SNMP JMX IPMI	NONE		
<input type="checkbox"/>	Zabbix server	Applications 12	Items 88	Triggers 48	Graphs 14	Discovery 3	Web	127.0.0.1:10050		Template App Zabbix Server, Template OS Linux by Zabbix agent (Template Module Linux block devices by Zabbix agent, Template Module Linux CPU by Zabbix agent, Template Module Linux filesystems by Zabbix agent, Template Module Linux generic by Zabbix agent, Template Module Linux memory by Zabbix agent, Template Module Linux network interfaces by Zabbix agent, Template Module Zabbix agent)	Enabled	ZBX SNMP JMX IPMI	NONE		

Displaying 2 of 2 found

0 selected Enable Disable Export Mass update Delete

Zabbix 4.4.0. © 2001–2019, Zabbix SIA

Zabbix server: Configurati... Почта — Aleksandr Shkr... Oracle VM VirtualBox Ma... [2.4] [2.4\_Zabbix\_API\_hometa... vagrant@agent~ server.sh (~/.2.4) - gedit [0204Zabbix\_server... 1/4

Applications Places Firefox

Zabbix server: Configuration of host groups - Mozilla Firefox

Telegram Web x Zabbix-ELK/01.Zabbix at x Zabbix server: Configurati x +

192.168.56.111/hostgroups.php?ddreset=1

**ZABBIX** Monitoring Inventory Reports Configuration Administration

Host groups Templates Hosts Maintenance Actions Event correlation Discovery Services

Host groups Create host group

Filter

Name:

Apply Reset

<input type="checkbox"/>	Name	Hosts	Templates	Members	Info
<input type="checkbox"/>	CLOUD HOSTS	Hosts 1	Templates	LinuxVM	
<input type="checkbox"/>	Discovered hosts	Hosts	Templates		
<input type="checkbox"/>	Hypervisors	Hosts	Templates		
<input type="checkbox"/>	Linux servers	Hosts	Templates		
<input type="checkbox"/>	Templates	Hosts	Templates		
<input type="checkbox"/>	Templates/Applications	Hosts	Templates 14		Template App Apache by HTTP, Template App Apache by Zabbix agent, Template App Apache Tomcat JMX, Template App Generic Java JMX, Template App Nginx by HTTP, Template App Nginx by Zabbix agent, Template App RabbitMQ cluster by HTTP, Template App RabbitMQ cluster by Zabbix agent, Template App RabbitMQ node by HTTP, Template App RabbitMQ node by Zabbix agent, Template App Remote Zabbix proxy, Template App Remote Zabbix server, Template App Zabbix Proxy, Template App Zabbix Server
<input type="checkbox"/>	Templates/Databases	Hosts	Templates 2		Template DB MySQL, Template DB PostgreSQL
<input type="checkbox"/>	Templates/Modules	Hosts	Templates 60		Template App FTP Service, Template App HTTP Service, Template App HTTPS Service, Template App IMAP Service, Template App LDAP Service, Template App NNTP Service, Template App NTP Service, Template App POP Service, Template App SMTP Service, Template App SSH Service, Template App Telnet Service, Template Module Brocade_Foundry Performance SNMPv2, Template Module Cisco CISCO-ENVMON-MIB SNMPv2, Template Module Cisco CISCO-MEMORY-POOL-MIB SNMPv2, Template Module Cisco CISCO-PROCESS-MIB IOS versions 12.0_3_T-12.2_3.5 SNMPv2, Template Module Cisco CISCO-PROCESS-MIB SNMPv2, Template Module Cisco CISCO-Inventory SNMPv2, Template Module Cisco OLD-CISCO-CPU-MIB SNMPv2, Template Module EtherLike-MIB SNMPv1, Template Module EtherLike-MIB SNMPv2, Template Module Generic SNMPv1, Template Module Generic SNMPv2, Template Module HOST-RESOURCES-MIB SNMPv1, Template Module HOST-RESOURCES-MIB SNMPv2, Template Module ICMP Ping, Template Module Interfaces Simple SNMPv1, Template Module Interfaces Simple SNMPv2, Template Module Interfaces SNMPv1, Template Module Interfaces SNMPv2, Template Module Linux block devices by Zabbix agent, Template Module Linux block devices by Zabbix agent active, Template Module Linux block devices SNMPv2, Template Module Linux CPU by Zabbix agent, Template Module Linux CPU SNMPv2, Template Module Linux filesystems by Zabbix agent, Template Module Linux filesystems by Zabbix agent active, Template Module Linux filesystems SNMPv2, Template Module Linux generic by Zabbix agent, Template Module Linux generic by Zabbix agent active, Template Module Linux memory by Zabbix agent, Template Module Linux memory by Zabbix agent active, Template Module Linux network interfaces by Zabbix agent, Template Module Linux network interfaces by Zabbix agent active, Template Module Linux network interfaces SNMPv2, Template Module Linux network interfaces by Zabbix agent, Template Module Linux network interfaces by Zabbix agent active, Template Module Windows CPU by Zabbix agent, Template Module Windows filesystems by Zabbix agent, Template Module Windows memory by Zabbix agent, Template Module Windows physical disks by Zabbix agent ...
<input type="checkbox"/>	Templates/Network devices	Hosts	Templates 25		Template Net Alcatel Timetra TIMOS SNMPv2, Template Net Arista SNMPv2, Template Net Brocade FC SNMPv2, Template Net Brocade_Foundry Nonstackable SNMPv2, Template Net Brocade_Foundry Stackable SNMPv2, Template Net Cisco IOS prior to 12.0_3_T SNMPv2, Template Net Cisco IOS SNMPv2, Template Net Cisco IOS versions 12.0_3_T-12.2_3.5 SNMPv2, Template Net D-Link DES_7200 SNMPv2, Template Net D-Link DES_DGS Switch SNMPv2, Template Net Dell Force S-Series SNMPv2, Template Net Extreme EXOS SNMPv2, Template Net HP Comware HH3C SNMPv2, Template Net HP Enterprise Switch SNMPv2, Template Net Huawei VRP SNMPv2, Template Net Intel_Qlogic Infiniband SNMPv2, Template Net Juniper SNMPv2, Template Net Mellanox SNMPv2, Template Net Mikrotik SNMPv2, Template Net Netgear Fastpath SNMPv2, Template Net Network Generic Device SNMPv1, Template Net Network Generic Device SNMPv2, Template Net Qtech QSW SNMPv2, Template Net TP-LINK SNMPv2, Template Net Ubiquiti AirOS SNMPv2

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