

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

```
sudo yum install zabbix-agent -y
sudo systemctl start zabbix-server
sudo systemctl start zabbix-agent
sudo systemctl restart httpd
sudo systemctl enable zabbix-server
sudo systemctl enable zabbix-agent
sudo systemctl enable httpd

yum install zabbix-get -y

#Creating host through zabbix API
/vagrant/HostApi.sh

[root@zabbixserver vagrant]#
```

- Host registered in Zabbix server should have Name = Hostname (not IP)

Hosts

Group: all

Name

Monitored by

Any

Server

Proxy

Templates

Select

Proxy

Select

DNS

Tags

And/Or

Or

IP

Port

tag

Contains

Equals

value

Remove

Add

Apply

Reset

| <input type="checkbox"/> | Name | Applications | Items | Triggers | Graphs | Discovery | Web | Interface | Templates | Status | Availability | Agent en |
|--------------------------|---------------|-----------------|----------|-------------|-----------|-------------|-----|-----------------------|---|---------|-------------------|----------|
| <input type="checkbox"/> | zabbixclient | Applications 10 | Items 34 | Triggers 15 | Graphs 5 | Discovery 2 | Web | 192.168.56.156: 10050 | My Custom Template, Template OS Linux (Template App Zabbix Agent) | Enabled | ZBX SNMP JMX IPMI | NONE |
| <input type="checkbox"/> | Zabbix server | Applications 11 | Items 79 | Triggers 48 | Graphs 11 | Discovery 2 | Web | 127.0.0.1: 10050 | Template App Zabbix Server, Template OS Linux (Template App Zabbix Agent) | Enabled | ZBX SNMP JMX IPMI | NONE |

- Host registered in Zabbix server should belong to "CloudHosts" group

Hosts

All hosts / zabbixclient

Enabled

ZBX

SNMP

JMX

IPMI

Applications 10

Items 34

Triggers 15

Graphs 5

Discovery rules 2

Web scenarios

Host

Templates

IPMI

Tags

Macros

Inventory

Encryption

* Host name

zabbixclient

Visible name

* Groups

CloudHosts

×

type here to search

Select

* At least one interface must exist.

Agent interfaces

| IP address | DNS name | Connect to | Port | Default |
|----------------|----------|------------|-------|--|
| 192.168.56.156 | | IP DNS | 10050 | <input checked="" type="radio"/> <div>Remove</div> |

Add

- Host registered in Zabbix server should be linked with Custom template

Template [Linked templates](#) [Tags](#) [Macros](#)

* Template name

Visible name

* Groups

CloudHosts ✕

type here to search

Select

Description

Update

Clone

Full clone

Delete

Delete and clear

Cancel

Hosts

[All hosts](#) / [zabbixclient](#) Enabled ZBX SNMP JMX IPMI [Applications 10](#) [Items 34](#) [Triggers 15](#) [Graphs 5](#) [Discovery rules 2](#) [Web scenarios](#)

[Host](#) [Templates](#) [IPMI](#) [Tags](#) [Macros](#) [Inventory](#) [Encryption](#)

Linked templates

| Name | Action |
|--------------------|---|
| My Custom Template | Unlink Unlink and clear |

Link new templates

type here to search

Select

[Add](#)

Update

Clone

Full clone

Delete

Cancel

- This script should create group “CloudHosts” id it doesn’t exist

| <input type="checkbox"/> | Name ▲ | Hosts | Templates | Members | Info |
|--------------------------|------------|---------|-------------|--------------------|------|
| <input type="checkbox"/> | CloudHosts | Hosts 1 | Templates 1 | My Custom Template | |
| | | | | zabbixclient | |

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