

EPAM Systems, RD Dep., RD Dep.

# MTN.NIX.05.Zabbix.Tools

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 Tools

### 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

### Task:

1. Configure the agent for replying to the specific server in passive and active mode.
2. Use zabbix\_sender to send data to server manually (use zabbix\_sender with key -vv for maximal verbosity).

The screenshot shows the Zabbix web interface. The top navigation bar includes 'Monitoring', 'Inventory', 'Reports', 'Configuration', and 'Administration'. Below this, a secondary bar shows 'Host groups', 'Templates', 'Hosts', 'Maintenance', 'Actions', 'Event correlation', 'Discovery', and 'Services'. The main content area is titled 'Items' and shows a breadcrumb path: 'All hosts / zbx-agent Enabled ZBX SNMP JMX IPMI Applications 12 Items 52 Triggers 15 Graphs 11 Discovery rules 3 Web sce'. The 'Item' tab is selected, and the 'Preprocessing' sub-tab is active. The form for creating a new item is displayed with the following fields:

- Name:** TEST-ITEM
- Type:** Zabbix trapper
- Key:** TEST.connections
- Type of information:** Text
- History storage period:** Do not keep history (selected), Storage period: 90d
- Allowed hosts:** (empty text field)
- New application:** (empty text field)
- Applications:** A dropdown menu is open, showing a list of applications: -None-, CPU, Disk sda, Filesystems, General, Inventory, Memory, Monitoring agent, Network interfaces, and Security.
- Populates host inventory field:** -None-
- Description:** (empty text area)
- Enabled:** ☒

At the bottom of the form, there are several buttons: 'Update', 'Clone', 'Check now', 'Clear history and trends', 'Delete', and 'Cancel'.

```
[root@zabbix-ag12 zabbix]# zabbix_sender -vv -z 192.168.56.121 -s "zbx-agent" -k TEST.connections -o its-test-message-from-sender
zabbix sender [13684]: DEBUG: answer [{"response":"success","info":"processed: 1; failed: 0; total: 1; seconds spent: 0.000028"}]
Response from "192.168.56.121:10051": "processed: 1; failed: 0; total: 1; seconds spent: 0.000028"
sent: 1; skipped: 0; total: 1
```

▼	zbx-agent	- other - (2 items)						
<input type="checkbox"/>	TEST-ITEM	90d	Zabbix trapper	2019-10-18 19:56:39	its-test-message-from-sender			<a href="#">History</a>
	TEST.connections							

3. Use zabbix\_get as data receiver and examine zabbix agent sending's.  
For both VMs use vagrant box "sbeliakou/centos-7.3-x86\_64-minimal"

```
[root@zabbix-srv12 vagrant]#
[root@zabbix-srv12 vagrant]# zabbix_get -s 192.168.56.122 -p 10050 -k vm.memory.size[available]
543526912
[root@zabbix-srv12 vagrant]# zabbix_get -s 192.168.56.122 -p 10050 -k 'system.cpu.load[all,avg1]'
0.000000
[root@zabbix-srv12 vagrant]# █
```