

EPAM Systems, RD Dep., RD Dep.

# MTN.NIX.05.Zabbix.Java

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. 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 2<sup>nd</sup> VM

Tasks:

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

zabbix.agentApplications 22Items 137Triggers 50Graphs 24Discovery 2Web192.168.56.102: 10050Template OS Linux (Template App Zabbix Agent)EnabledZBXSNMPJMXIPMINONE

### Hosts

All hosts / zabbix.agentEnabledZBXSNMPJMXIPMIApplications 22Items 137Triggers 50Graphs 24Discovery rules 2Web scenarios

HostTemplatesIPMI MacrosHost inventoryEncryption

\* Host namezabbix.agent

Visible name

\* GroupsVirtual machines Xtype here to searchSelect

\* At least one interface must exist.

Agent interfaces

IP address	DNS name	Connect to	Port	Default
192.168.56.102		IPDNS	10050	<input checked="" type="radio"/> Remove
<a href="#">Add</a>				

SNMP interfaces

[Add](#)

JMX interfaces

192.168.56.102		IPDNS	12345	<input checked="" type="radio"/> Remove
192.168.56.102		IPDNS	8097	<input type="radio"/> Remove
<a href="#">Add</a>				

Host groups

type here to search

Select

Hosts

zabbix.agent X

type here to search

Select

Application

Select

Name

Show items without data☒

Show details☐

Apply

Reset

<input type="checkbox"/> Host	Name ▲	Last check	Last value	Change	
<input checked="" type="checkbox"/> zabbix.agent	CPU (15 items)				
<input type="checkbox"/>	Context switches per second	2019-10-18 14:37:23	140 sps	+9 sps	<a href="#">Graph</a>
<input type="checkbox"/>	CPU guest nice time	2019-10-18 14:37:26	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU guest time	2019-10-18 14:37:25	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU idle time	2019-10-18 14:37:12	99.9666 %	+0.0163 %	<a href="#">Graph</a>
<input type="checkbox"/>	CPU interrupt time	2019-10-18 14:37:20	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU iowait time	2019-10-18 14:37:16	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU nice time	2019-10-18 14:37:14	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU softirq time	2019-10-18 14:37:19	0 %	-0.0083 %	<a href="#">Graph</a>
<input type="checkbox"/>	CPU steal time	2019-10-18 14:37:18	0 %		<a href="#">Graph</a>
<input type="checkbox"/>	CPU system time	2019-10-18 14:37:15	0.0167 %	-0.0082 %	<a href="#">Graph</a>
<input type="checkbox"/>	CPU user time	2019-10-18 14:37:13	0.0167 %	+0.0001 %	<a href="#">Graph</a>
<input type="checkbox"/>	Interrupts per second	2019-10-18 14:37:24	89 ips	+3 ips	<a href="#">Graph</a>
<input type="checkbox"/>	Processor load (1 min average per core)	2019-10-18 14:36:57	0		<a href="#">Graph</a>
<input type="checkbox"/>	Processor load (5 min average per core)	2019-10-18 14:37:21	0.005		<a href="#">Graph</a>
<input type="checkbox"/>	Processor load (15 min average per core)	2019-10-18 14:37:22	0.025		<a href="#">Graph</a>
<input checked="" type="checkbox"/> zabbix.agent	Filesystems (10 items)				
<input type="checkbox"/>	Free disk space on /	2019-10-18 14:36:56	15.4 GB		<a href="#">Graph</a>
<input type="checkbox"/>	Free disk space on / (percentage)	2019-10-18 14:37:04	90.6414 %		<a href="#">Graph</a>
<input type="checkbox"/>	Free disk space on /boot	2019-10-18 14:36:57	852.48 MB		<a href="#">Graph</a>
<input type="checkbox"/>	Free disk space on /boot (percentage)	2019-10-18 14:37:05	84.0714 %		<a href="#">Graph</a>
<input type="checkbox"/>	Free inodes on / (percentage)	2019-10-18 14:36:58	99.3982 %		<a href="#">Graph</a>
<input type="checkbox"/>	Free inodes on /boot (percentage)	2019-10-18 14:36:59	99.9367 %		<a href="#">Graph</a>

2. Configure triggers to alert once these parameters changed.

Problems

Time ▼	Info	Host	Problem • Severity	Duration	Ack	Actions	Tags
14:52:04		zabbix.agent	Low Heap	12s	No		

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