EPAM Systems, RD Dep., RD Dep.

MTN.NIX.05.Zabbix.Basics

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. Basics

Testing Infrastructure:

Vagrantfile to spin up 2 VMs (virtualbox):
- zabbix server, provisioned by Vagrant provisioner
- Zabbix agents on both VMs, provisioned by Vagrant provisioner

Configure zabbix to work on the server directly without /zabbix

http://zabbix-server/zabbix -> http://zabbix-server

```
#Alias /zabbix /usr/share/zabbix
DocumentRoot "/usr/share/zabbix/"
```
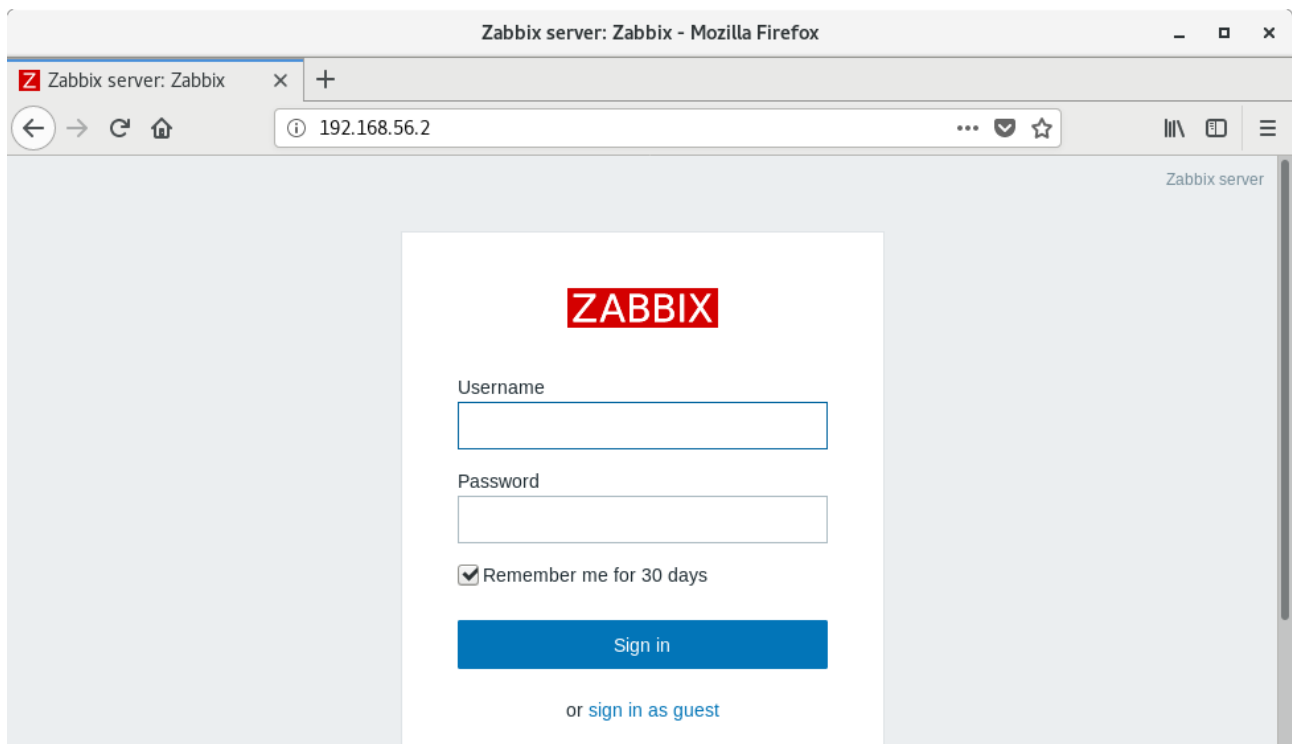

Task:

You should install and configure Zabbix server and agents.

1. **Using Zabbix UI:**
   - Create User group "Project Owners"

- Create User (example "Siarhei Beliakou"), assign user to "Project Owners", set email

- Add 2nd VM to zabbix: create Host group ("Project Hosts"), create Host in this group, enable ZABBIX Agent monitoring
- Assign to this host template of Linux

- Create custom checks (CPU Load, Memory load, Free space on file systems, Network load)

- **Create trigger with Severity HIGH, check if it works (Problem/Recovery)**

Information	Template OS Linux: Configured max number of opened files is too low on {HOST.NAME}	{remote-agent:kernel.maxfiles.**last**(0)}<1024	Enabled
Information	Template OS Linux: Configured max number of processes is too low on {HOST.NAME}	{remote-agent:kernel.maxproc.**last**(0)}<256	Enabled
Average	CPU load alert	{remote-agent:system.cpu.load[,avg1].**delta**(180,30)}>0.5	Enabled
Warning	Template OS Linux: Disk I/O is overloaded on {HOST.NAME}	{remote-agent:system.cpu.util[,iowait].**avg**(5m)}>20	Enabled

- **Create Action to inform "Project Owners" if HIGH triggers happen -media set**

Media types

Name	Gmail
Type	Email
SMTP server	smtp.gmail.com
SMTP server port	465
SMTP helo	gmail.com
SMTP email	tsyuliou@gmail.com
Connection security	None STARTTLS SSL/TLS
SSL verify peer	☐
SSL verify host	☐
Authentication	None Username and password
Username	atsyuliou
Password	Change password
Enabled	☑

Update   Clone   Delete   Cancel

☐ pzdc action	Trigger severity = *Average* Trigger name like *pzdc*	**Send message to users:** atsyuliou (aliaksei tsyuliou) via all media **Send message to user groups:** Project Owners via all media	Enabled

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

2. **Using Zabbix UI:**
   - Configure "Network discovery" so that, 2nd VM will be joined to Zabbix (group "Project Hosts", Template "Template OS Linux")

Discovery rules

Name	Local network
Discovery by proxy	No proxy
IP range	192.168.56.1-254
Delay (in sec)	60
Checks	Zabbix agent "system.uname" Edit Remove New
Device uniqueness criteria	⦿ IP address ◯ Zabbix agent "system.uname"
Enabled	✔

Update Clone Delete Cancel

Action   Operations

Name	custom		

Type of calculation   And/Or   ▾   A and B and C and D

Conditions

Label	Name		Action
A	Host IP = *192.168.56.1-254*		Remove
B	Discovery status = *Up*		Remove
C	Service type = *Zabbix agent*		Remove
D	Uptime/Downtime >= *600*		Remove

New condition

Uptime/Downtime ▾   >= ▾   600

Add

Enabled ✔

[Add]   [Cancel]

Actions

Action   Operations

Default subject   Discovery: {DISCOVERY.DEVICE.STATUS} {DISCOVERY.DEVICE.IPADDRESS}

Default message   Discovery rule: {DISCOVERY.RULE.NAME}

Device IP:{DISCOVERY.DEVICE.IPADDRESS}
Device DNS: {DISCOVERY.DEVICE.DNS}
Device status: {DISCOVERY.DEVICE.STATUS}
Device uptime: {DISCOVERY.DEVICE.UPTIME}

Device service name: {DISCOVERY.SERVICE.NAME}

Operations

Details	Action
Add to host groups: Project Hosts	Edit Remove
Link to templates: Template JMX Generic, Template OS Linux	Edit Remove
New	

[Add]   [Cancel]

Status of discovery			Discovery rule all

Discovered device ▲	Monitored host	Uptime/Downtime	Zabbix agent: system.uname
Local network (1 device)			
192.168.56.3	remote-agent	00:26:37	

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