

EPAM Systems, RD Dep., RD Dep.

MTN.NIX.05.Zabbix.Items

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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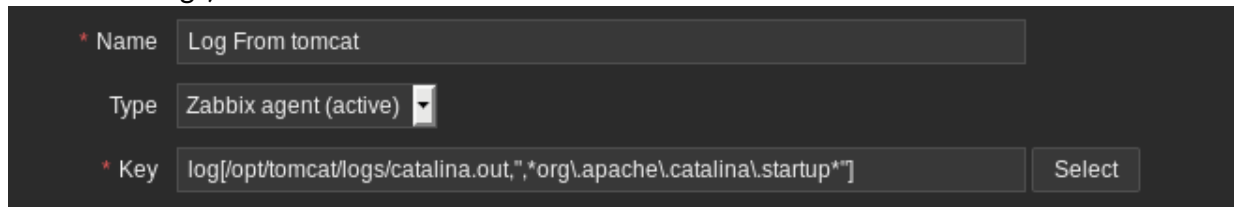
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Task. Items

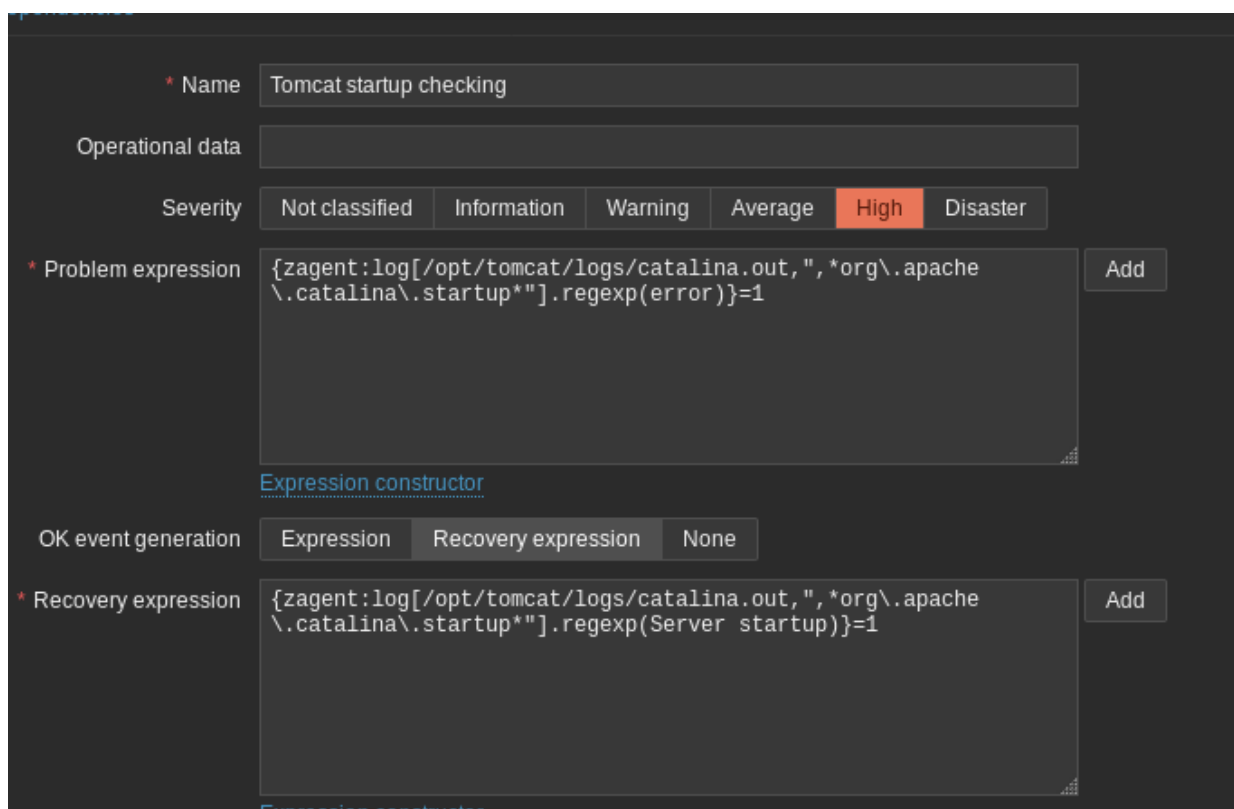
Task:

Assuming we have 2 servers (VMs) – ZabbixServer and Tomcat,
Configure:

1. Create item and develop custom trigger for log monitoring (you can use httpd or tomcat logs)

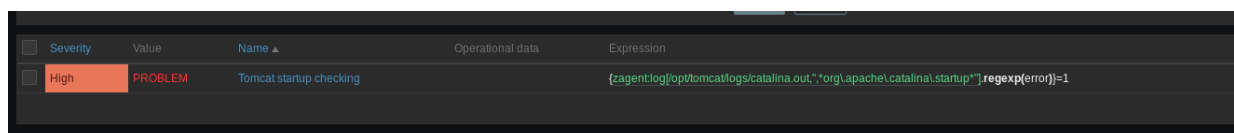


Screenshot of the Zabbix Item configuration form. The form has three main fields: Name, Type, and Key. The Name field contains 'Log From tomcat'. The Type field is a dropdown menu showing 'Zabbix agent (active)'. The Key field contains 'log[/opt/tomcat/logs/catalina.out,"*org.apache.catalina.startup*"]'. There is a 'Select' button next to the Key field.



Screenshot of the Zabbix Trigger configuration form. The form has several sections: Name, Operational data, Severity, Problem expression, OK event generation, and Recovery expression. The Name field contains 'Tomcat startup checking'. The Operational data field is empty. The Severity field has tabs for 'Not classified', 'Information', 'Warning', 'Average', 'High' (selected), and 'Disaster'. The Problem expression field contains the expression '{zagent:log[/opt/tomcat/logs/catalina.out,"*org.apache.catalina.startup*"].regexp(error)}=1'. There is an 'Add' button next to the Problem expression field. The OK event generation field has tabs for 'Expression', 'Recovery expression', and 'None'. The Recovery expression field contains the expression '{zagent:log[/opt/tomcat/logs/catalina.out,"*org.apache.catalina.startup*"].regexp(Server startup)}=1'. There is an 'Add' button next to the Recovery expression field.

2. Create a trigger for errors in log file monitored by that item



Severity	Value	Name	Operational data	Expression
High	PROBLEM	Tomcat startup checking		{zagent:log[/opt/tomcat/logs/catalina.out,"*org.apache.catalina.startup*"].regexp(error)}=1

1. Simple checks:

- Zabbix DB is available (3306)

* Name

Type

* Key

Host interface

Time	Info	Host	Problem • Severity	Duration	Ack
10:49:48		Zabbix server	Zabbix DB Service unavailable	26s	No

2. Calculated Checks:

- CPU Load per Core (1, 5, 15min)

zabbix	CPU (6 items)			
<input type="checkbox"/>	Load average (1m avg)	2019-10-21 12:19:22	0	Graph
<input type="checkbox"/>	Load average (5m avg)	2019-10-21 12:19:11	0.01	Graph
<input type="checkbox"/>	Load average (15m avg)	2019-10-21 12:19:26	0.05	Graph
<input type="checkbox"/>	Per CPU LOAD avg1 v1.1	2019-10-21 12:19:12	0	Graph
<input type="checkbox"/>	Per CPU LOAD avg5 v1.1	2019-10-21 12:19:14	0.005	Graph
<input type="checkbox"/>	Per CPU LOAD avg15 v1.1	2019-10-21 12:19:15	0.025	Graph

Severity	Value	Name	Operational data	Expression	Status	Info	Tags
Average	OK	High load average 1		{zabbix.perCpuAvg1.last()}>=1	Enabled		
Average	OK	High load average 5		{zabbix.perCpuAvg5.last()}>=1	Enabled		
Average	OK	High load average 15		{zabbix.perCpuAvg15.last()}>=1	Enabled		

0 selected

Displaying 3 of 3 found.

3. Internal Checks:

- How many items are enabled

Host	Name	Last check	Last value	Change
Zabbix server	Inventory (5 items)			
<input type="checkbox"/>	Internal checks hosts	2019-10-21 12:22:57	2	Graph
<input type="checkbox"/>	Internal items	2019-10-21 12:22:56	123	Graph

- How many Servers are being monitored

Time	Info	Host	Problem • Severity	Duration
12:26:37		Zabbix server	More than 1 host in zabbix environment	17s
12:25:36		Zabbix server	Number of internal items more than 50	1m 18s

Create triggers for every check

4. Configure Custom graphs and screens of your infrastructure: 2 VMS, Zabbix Server and Tomcat Server

