

## Task:

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

<input type="checkbox"/>	Wizard	Name	Triggers	Key	Interval	History	Trends	Type	Applications	Status	Info
<input type="checkbox"/>	...	Tomcat log	Triggers 1	log/opt/tomcat/latest/logs/catalina.out	10s	90d		Zabbix agent (active)		Enabled	

  

<input type="checkbox"/>	Severity	Value	Name	Expression	Status	Info	Tags
<input type="checkbox"/>	Average	OK	Tomcat log error	{nginx2.log[log/opt/tomcat/latest/logs/catalina.out].str(error.1)}=1	Enabled		

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

<input type="checkbox"/>	Severity	Value	Name	Expression	Status	Info	Tags
<input type="checkbox"/>	Average	PROBLEM	Tomcat log error	{nginx2.log[log/opt/tomcat/latest/logs/catalina.out].str(error.1)}=1	Enabled		

## Task:

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

### 1. Simple checks:

- Zabbix Server WEB availability (80)
- Zabbix DB is available (3306)
- Tomcat availability (8080)
- Tomcat Server is available by ssh (22)

<input type="checkbox"/>	Wizard	Name	Triggers	Key	Interval	History	Trends	Type	Applications	Status	Info
<input type="checkbox"/>	...	Zabbix Server WEB availability	Triggers 1	net.tcp.service[http.192.168.219.90.80]	30s	90d	365d	Simple check		Enabled	
<input type="checkbox"/>	...	Zabbix DB	Triggers 1	net.tcp.service[tcp.3306]	30s	90d	365d	Simple check		Enabled	
<input type="checkbox"/>	...	Tomcat Server is available by ssh	Triggers 1	net.tcp.service[ssh.192.168.219.94.22]	30s	90d	365d	Simple check		Enabled	
<input type="checkbox"/>	...	Tomcat availability 8080	Triggers 1	net.tcp.service[http.192.168.219.94.8080]	30s	90d	365d	Simple check		Enabled	

  

<input type="checkbox"/>	Severity	Value	Name	Expression	Status	Info	Tags
<input type="checkbox"/>	Warning	OK	Tomcat ssh not available	{nginx4-net.tcp.service[ssh.192.168.219.94.22].last(#1.1)}<1	Enabled		
<input type="checkbox"/>	Average	OK	Tomcat not available	{nginx4-net.tcp.service[http.192.168.219.94.8080].last(#1.1)}<1	Enabled		
<input type="checkbox"/>	High	OK	Zabbix not available	{nginx4-net.tcp.service[tcp.3306].last(#1.1)}<1 or {nginx4-net.tcp.service[http.192.168.219.90.80].last(#1.1)}<1	Enabled		

### 2. Calculated Checks:

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

<input type="checkbox"/>	Wizard	Name	Triggers	Key	Interval	History	Trends	Type	Applications	Status	Info
<input type="checkbox"/>	...	CPU Load increase	Triggers 1	cpu.load.percore	10s	90d	365d	Calculated		Enabled	
<input type="checkbox"/>	...	CPU Load per Core 1	Triggers 1	system.cpu.load[percpu.avg1]	10s	90d	365d	Zabbix agent (active)		Enabled	
<input type="checkbox"/>	...	CPU Load per Core 5	Triggers 1	system.cpu.load[percpu.avg5]	10s	90d	365d	Zabbix agent (active)		Enabled	
<input type="checkbox"/>	...	CPU Load per Core 15	Triggers 1	system.cpu.load[percpu.avg15]	10s	90d	365d	Zabbix agent (active)		Enabled	

  

\* Name

Type

\* Key

\* Formula

  

<input type="checkbox"/>	Severity	Value	Name	Expression	Status	Info	Tags
<input type="checkbox"/>	Average	OK	CPU load increase 15min	{nginx2-cpu.load.percore.last(15m)}=1	Enabled		
<input type="checkbox"/>	Warning	OK	Processor load high 5m	{nginx2-system.cpu.load[percpu.avg1].avg(5m)}>5	Enabled		
<input type="checkbox"/>	Warning	OK	Processor load high 15m	{nginx2-system.cpu.load[percpu.avg5].avg(15m)}>5	Enabled		
<input type="checkbox"/>	Warning	OK	Processor load high 30m	{nginx2-system.cpu.load[percpu.avg15].avg(30m)}>5	Enabled		

### 3. Internal Checks:

- How many items are enabled
- How many Servers are being monitored

<input type="checkbox"/>	...	Zabbix items enabled	zabbix[host.items]	30s	90d	365d	Zabbix internal	Enabled	
<input type="checkbox"/>	...	Zabbix monitored servers	zabbix[hosts]	30s	90d	365d	Zabbix internal	Enabled	

  

<input type="checkbox"/>	Severity	Value	Name	Expression	Status	Info	Tags
<input type="checkbox"/>	Information	OK	Host more than 100	{nginx4-zabbix[hosts].last()}>100	Enabled		
<input type="checkbox"/>	Information	OK	Items more than 300	{nginx4-zabbix[host.items].last()}>300	Enabled		