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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Task. Items

Task:

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

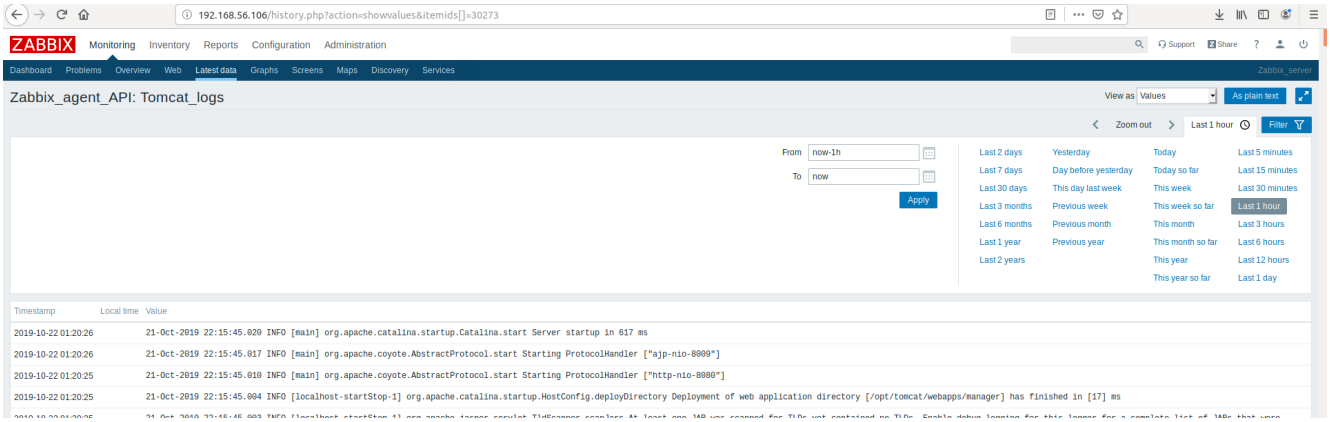
1. Simple checks:
   - Zabbix Server WEB availability (80)
   - Zabbix DB is available (3306)
   - Tomcat availability (80, 8080)
   - Tomcat Server is available by ssh (22)
2. Calculated Checks:
   - CPU Load per Core (1, 5, 15min)
3. Internal Checks:
   - How many items are enabled
   - How many Servers are being monitored

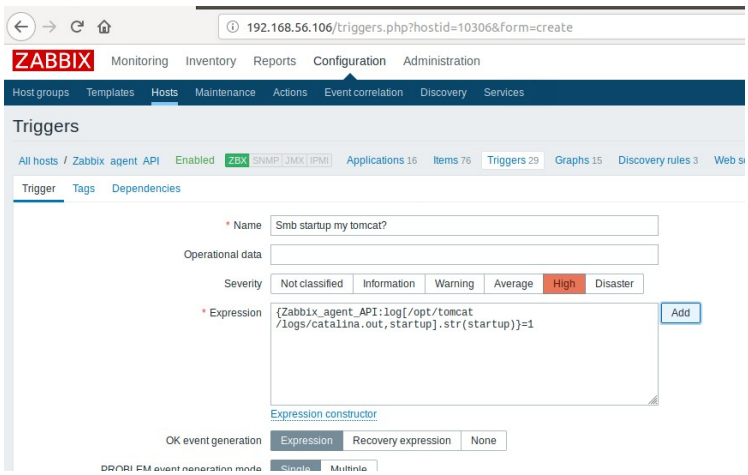
Create triggers for every check

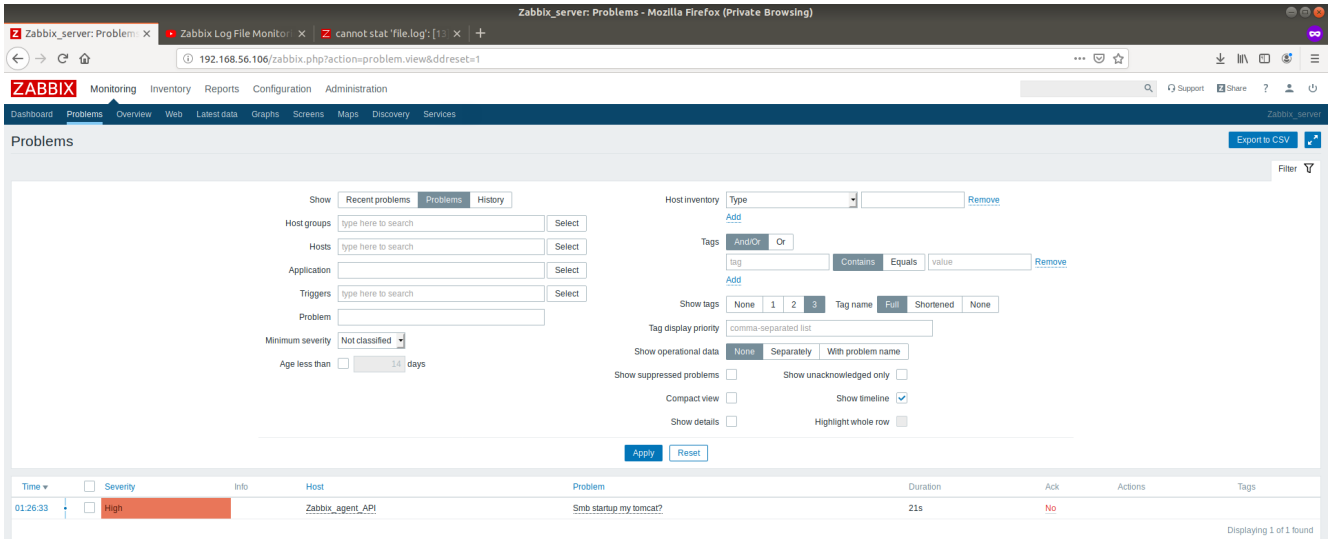
And logs monitoring.

I sent also scripts and Vagrantfile, because I added setting up /etc/zabbix/web/zabbix.conf.php for configuration of UI via script.

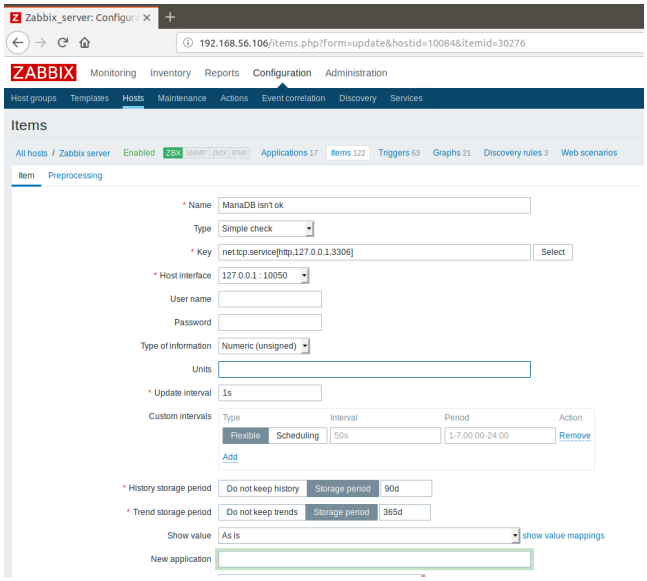
Log monitoring.

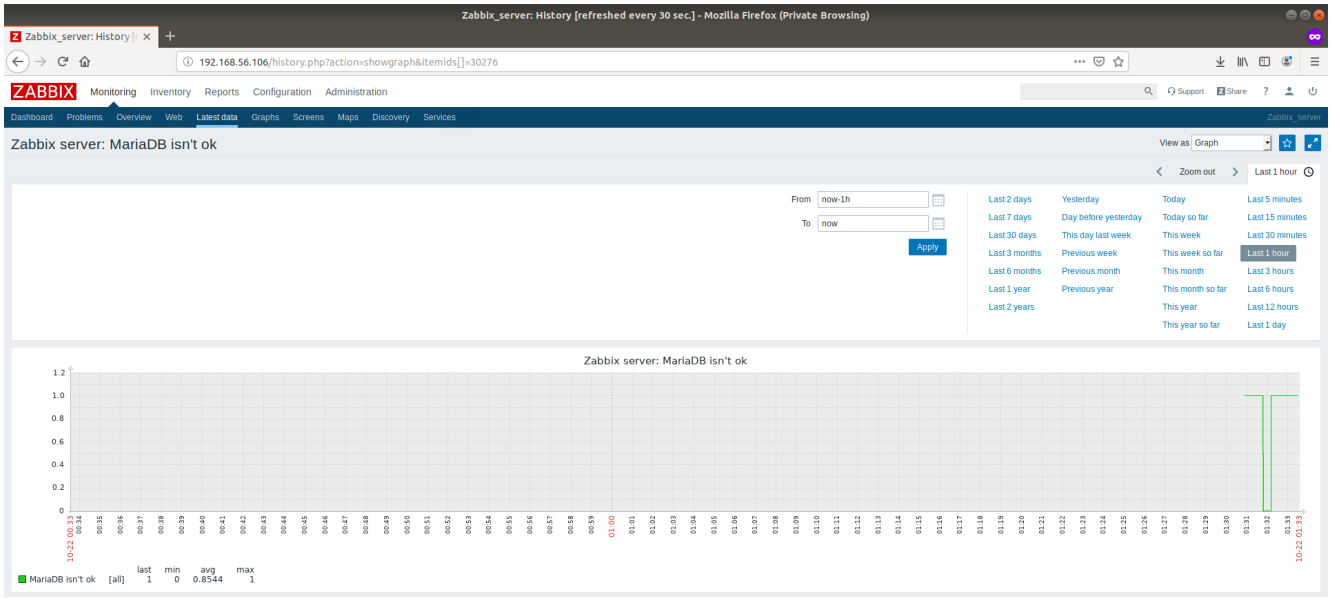


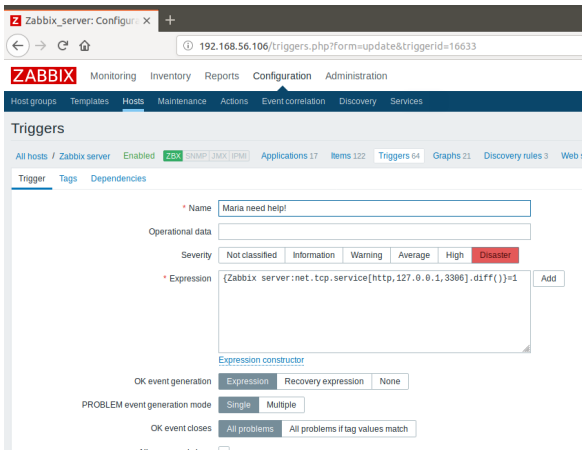


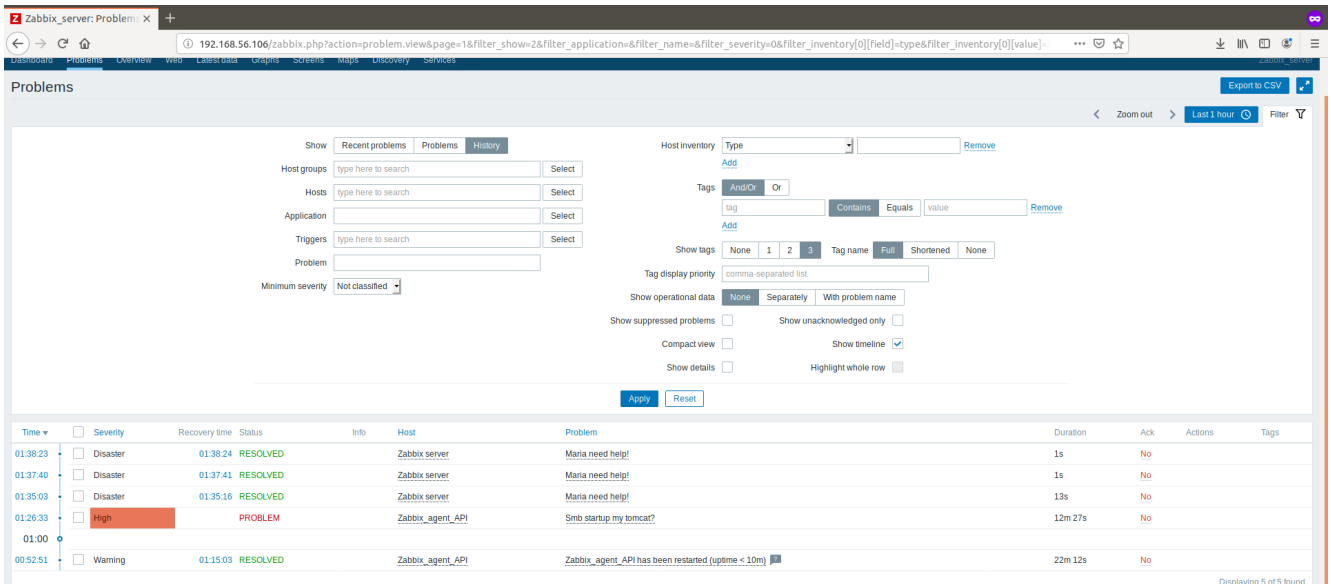


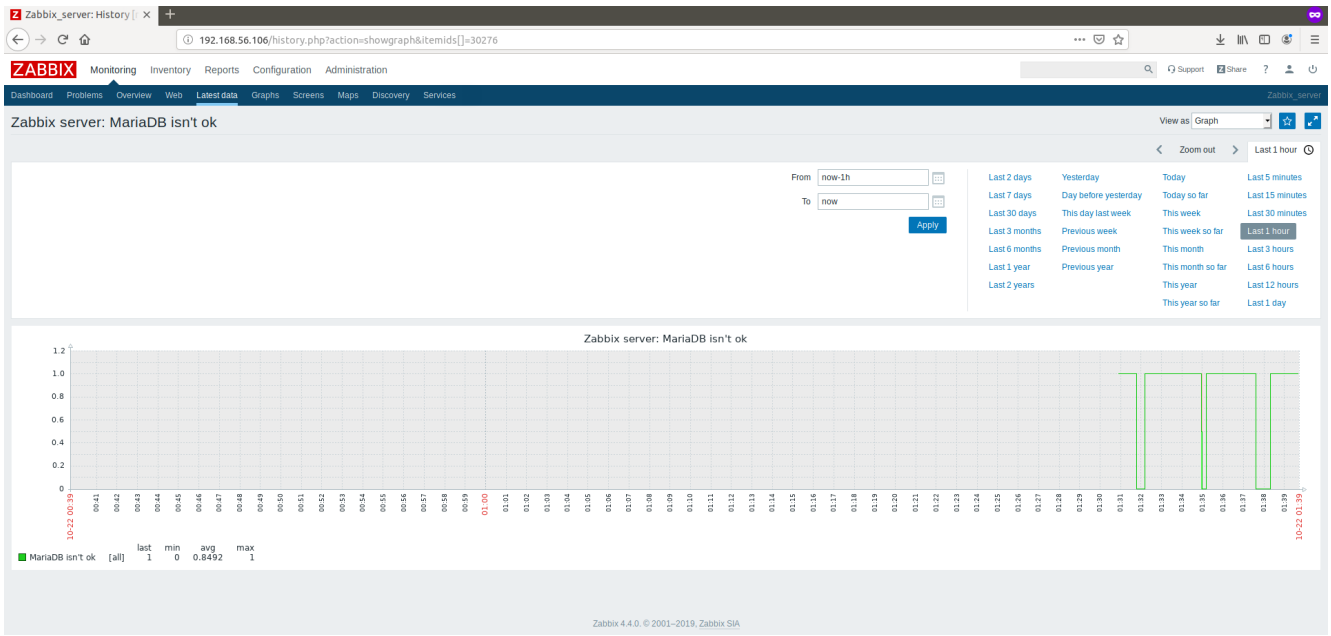
Zabbix DB is available on 3306 http port.



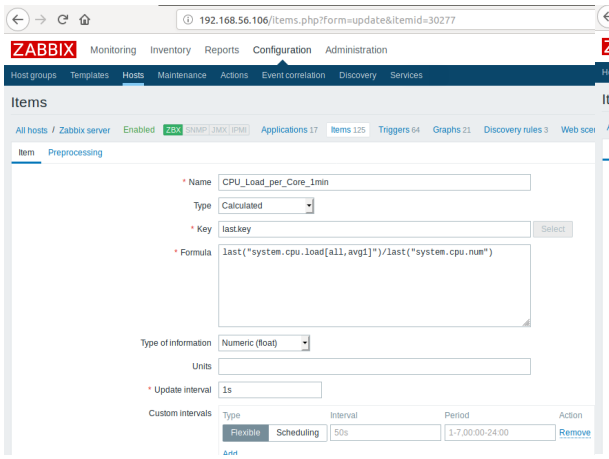


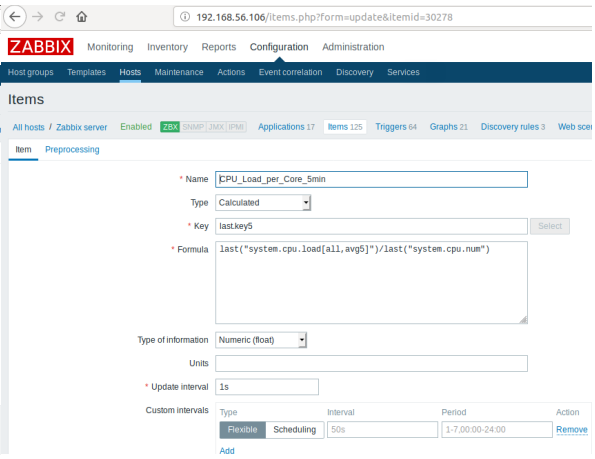

Zabbix_server: Configur
192.168.56.106/triggers.php?form=update&triggerid=16633
ZABBIX
Monitoring Inventory Reports Configuration Administration
Host groups Templates Hosts Maintenance Actions Event correlation Discovery Services
Triggers
All hosts / Zabbix server Enabled ZBX SNMP JMX IPMI Applications 17 Items 122 Triggers 64 Graphs 21 Discovery rules 3
Trigger Tags Dependencies
* Name Maria need help!
Operational data
Severity Not classified Information Warning Average High Disaster
* Expression {Zabbix server:net.tcp.service[http,127.0.0.1,3306].diff()}=1 Add
Expression constructor
OK event generation Expression Recovery expression None
PROBLEM event generation mode Single Multiple
OK event closes All problems All problems if tag values match

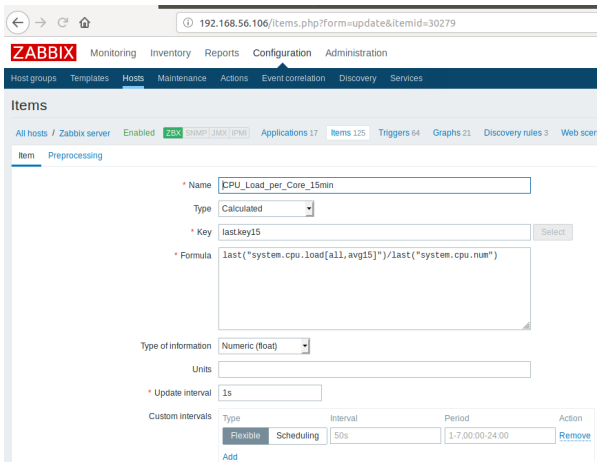

Zabbix_server: Problem
192.168.56.106/zabbix.php?action=problem.view&page=1&filter_show=2&filter_application=&filter_name=&filter_severity=0&filter_inventory[0][field]=type&filter_inventory[0][value]
Problems
Export to CSV
Zoom out Last 1 hour Filter
Show Recent problems Problems History
Host groups type here to search Select
Hosts type here to search Select
Application Select
Triggers type here to search Select
Problem
Minimum severity Not classified
Host inventory Type Remove Add
Tags And/Or Or
tag Contains Equals value Remove Add
Show tags None 1 2 3 Tag name Full Shortened None
Tag display priority comma-separated list
Show operational data None Separately With problem name
Show suppressed problems Show unacknowledged only
Compact view Show timeline
Show details Highlight whole row
Apply Reset
Time Severity Recovery time Status Info Host Problem Duration Ack Actions Tags
01:38:23 Disaster 01:38:24 RESOLVED Zabbix server Maria need help! 1s No
01:37:40 Disaster 01:37:41 RESOLVED Zabbix server Maria need help! 1s No
01:35:03 Disaster 01:35:16 RESOLVED Zabbix server Maria need help! 13s No
01:26:33 High PROBLEM Zabbix_agent_API Smb startup my tomcat? 12m 27s No
01:00
00:52:51 Warning 01:15:03 RESOLVED Zabbix_agent_API Zabbix_agent_API has been restarted (uptime < 10m) 22m 12s No
Displaying 5 of 5 found

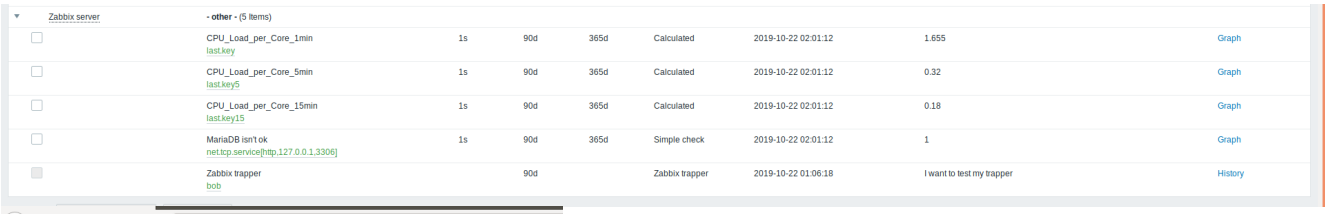

Zabbix_server: History
192.168.56.106/history.php?action=showgraph&itemids[]=30276
ZABBIX
Monitoring Inventory Reports Configuration Administration
Dashboard Problems Overview Web Latest data Graphs Screens Maps Discovery Services
Zabbix server: MariaDB isn't ok
View as Graph
Zoom out Last 1 hour
From now-1h
To now
Apply
Last 2 days Yesterday Today Last 5 minutes
Last 7 days Day before yesterday Today so far Last 15 minutes
Last 30 days This day last week This week Last 30 minutes
Last 3 months Previous week This week so far Last 1 hour
Last 6 months Previous month This month Last 3 hours
Last 1 year Previous year This month so far Last 6 hours
Last 2 years This year Last 12 hours
This year so far Last 1 day
Zabbix server: MariaDB isn't ok
1.2
1.0
0.8
0.6
0.4
0.2
0
10-22 00:39
10-22 01:39
MariaDB isn't ok [all] last 1 min 0 avg 0.8492 max 1
Zabbix 4.4.0. © 2001–2019, Zabbix SIA

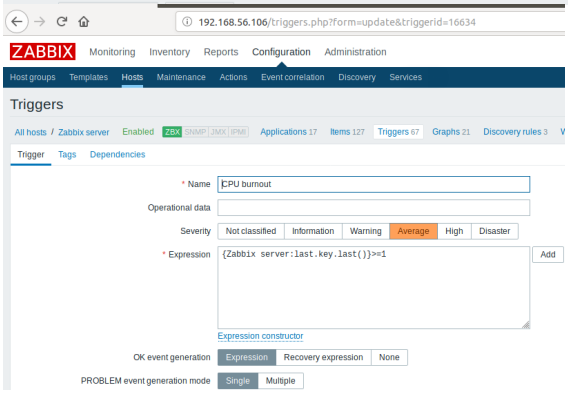
CPU Load per Core (1min,5min,15min)

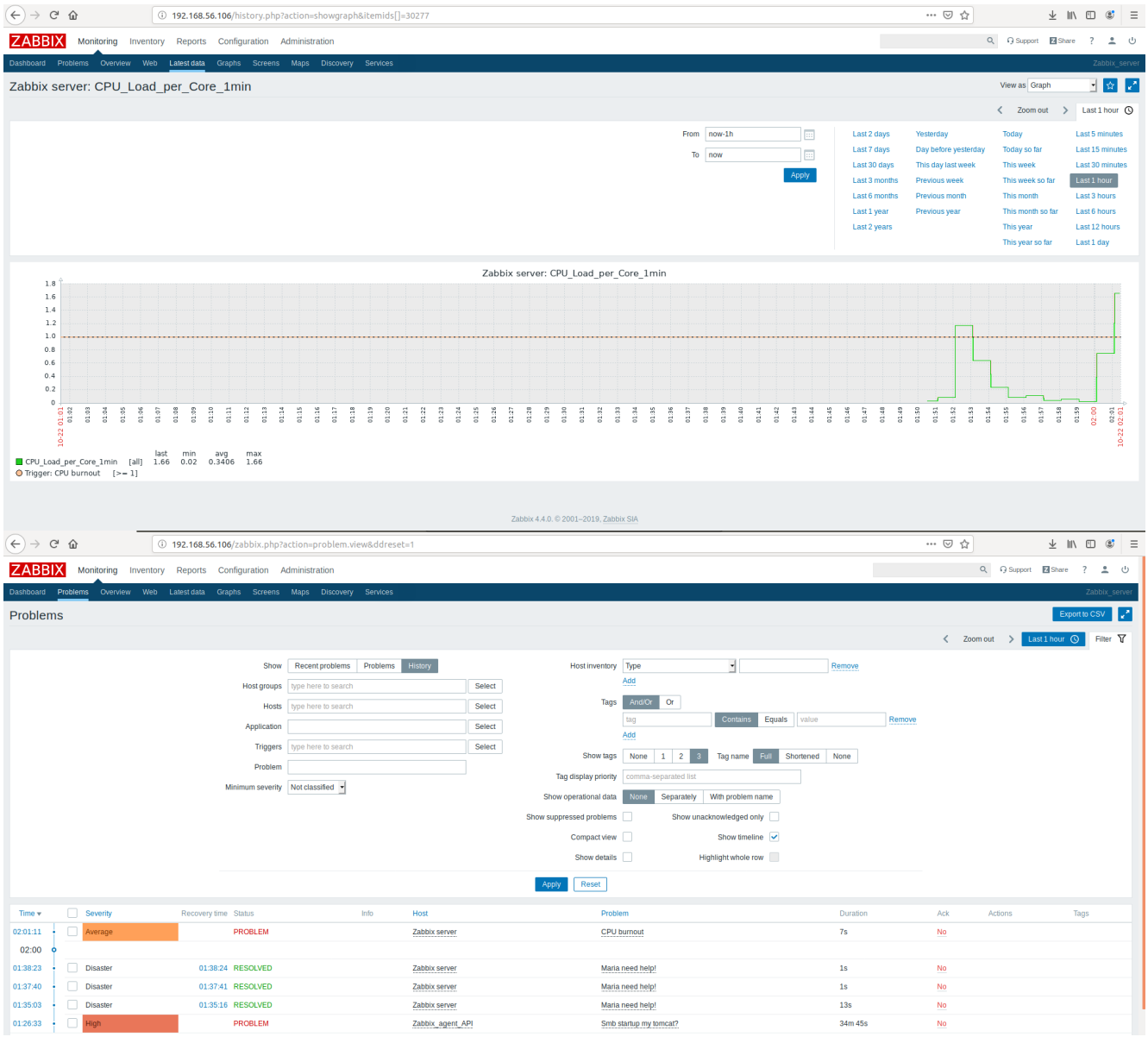




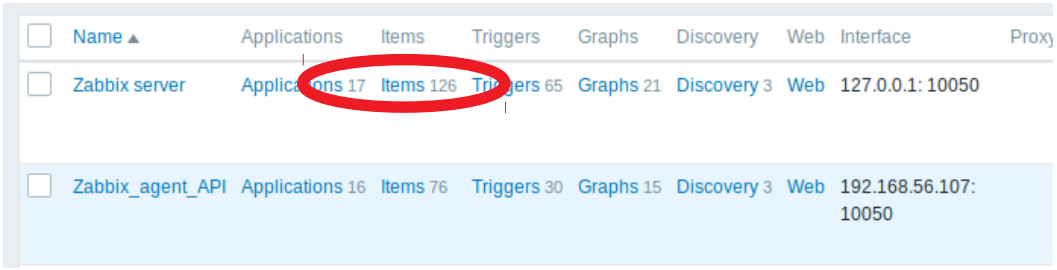


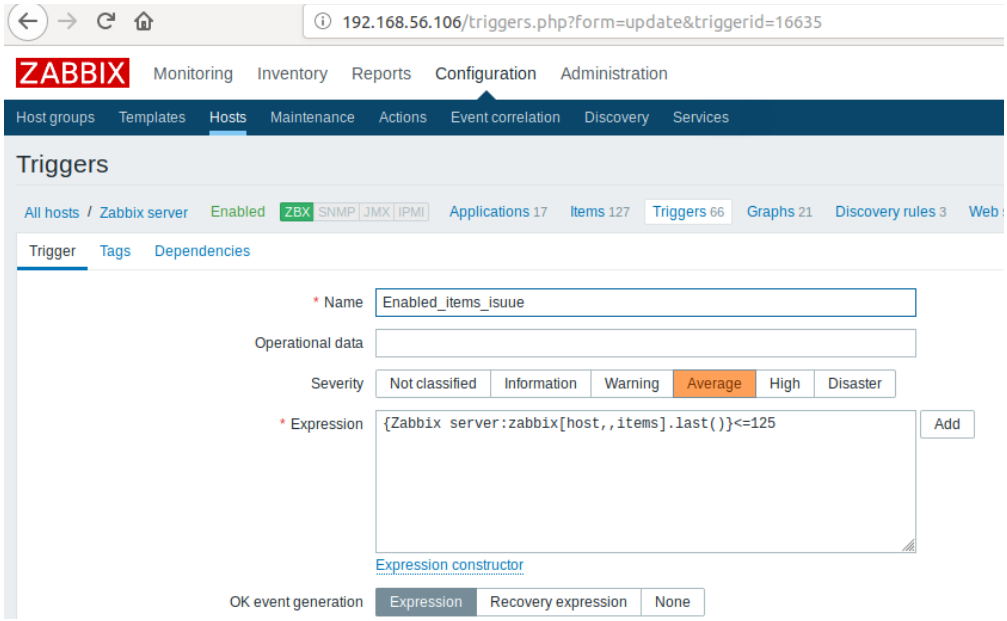


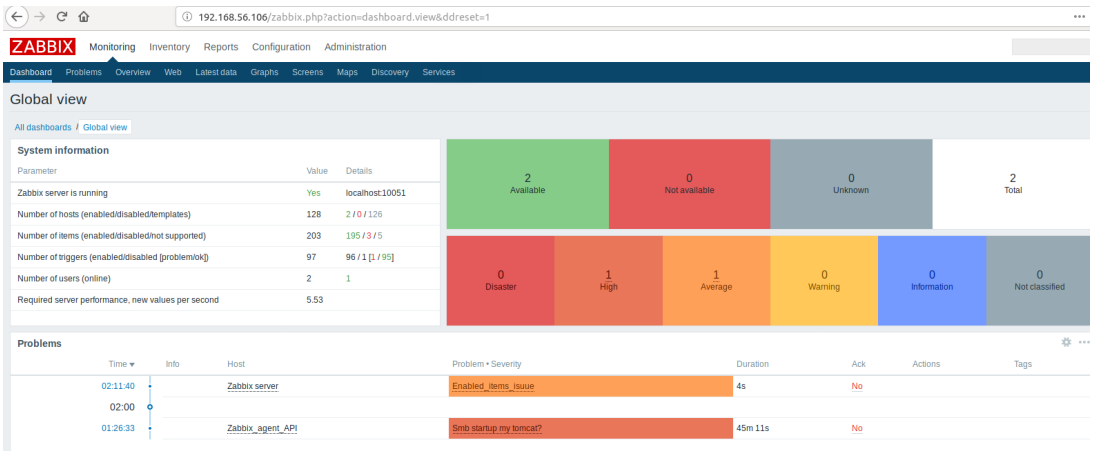


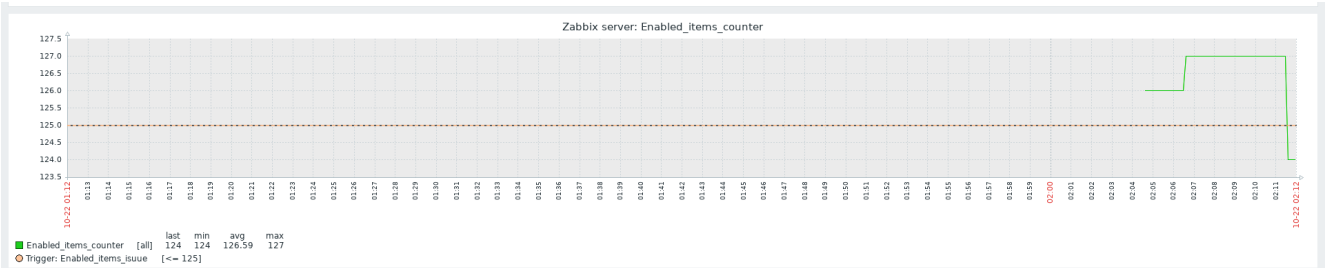

192.168.56.106/history.php?action=showgraph&itemids[]=30277
ZABBIX
Monitoring
Inventory
Reports
Configuration
Administration
Dashboard
Problems
Overview
Web
Latest data
Graphs
Screens
Maps
Discovery
Services
Zabbix server: CPU_Load_per_Core_1min
View as
Graph
Zoom out
Last 1 hour
From
now-1h
To
now
Apply
Last 2 days
Yesterday
Today
Last 5 minutes
Last 7 days
Day before yesterday
Today so far
Last 15 minutes
Last 30 days
This day last week
This week
Last 30 minutes
Last 3 months
Previous week
This week so far
Last 1 hour
Last 6 months
Previous month
This month
Last 3 hours
Last 1 year
Previous year
This month so far
Last 6 hours
Last 2 years
This year
Last 12 hours
This year so far
Last 1 day
Zabbix server: CPU_Load_per_Core_1min
CPU_Load_per_Core_1min [all] 1.66 0.02 0.3406 1.66
Trigger: CPU burnout [>= 1]
Zabbix 4.4.0. © 2001–2019, Zabbix SIA
192.168.56.106/zabbix.php?action=problem.view&ddreset=1
Problems
Export to CSV
Filter
Show
Recent problems
Problems
History
Host groups
Hosts
Application
Triggers
Problem
Minimum severity
Not classified
Select
Host inventory
Tags
And/Or
Or
Contains
Equals
Remove
Add
Show tags
Tag name
Full
Shortened
Tag display priority
Show operational data
Separately
With problem name
Show suppressed problems
Show unacknowledged only
Compact view
Show timeline
Show details
Highlight whole row
Apply
Reset
Time
Severity
Recovery time
Status
Info
Host
Problem
Duration
Ack
Actions
Tags
02:01:11 Average PROBLEM Zabbix server CPU burnout 7s No
02:00
01:38:23 Disaster 01:38:24 RESOLVED Zabbix server Maria need help! 1s No
01:37:40 Disaster 01:37:41 RESOLVED Zabbix server Maria need help! 1s No
01:35:03 Disaster 01:35:16 RESOLVED Zabbix server Maria need help! 13s No
01:26:33 High PROBLEM Zabbix_agent_API Smb startup my tomcat? 34m 45s No

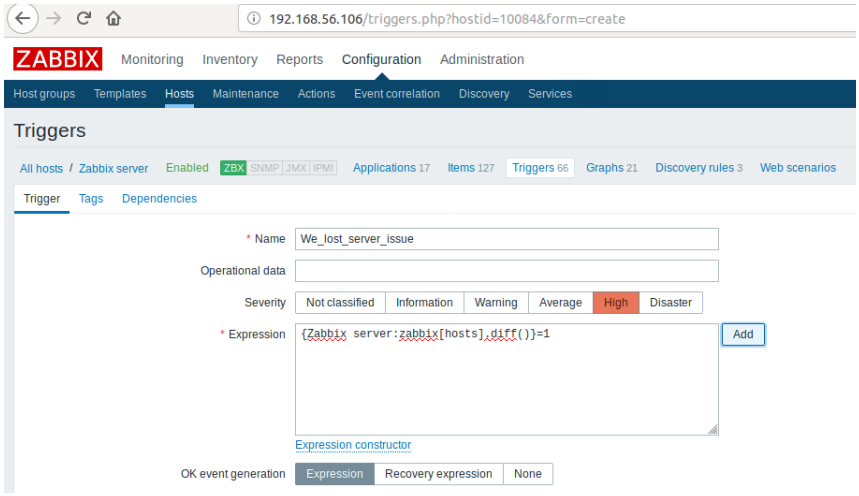
Internal checks and triggers for them.

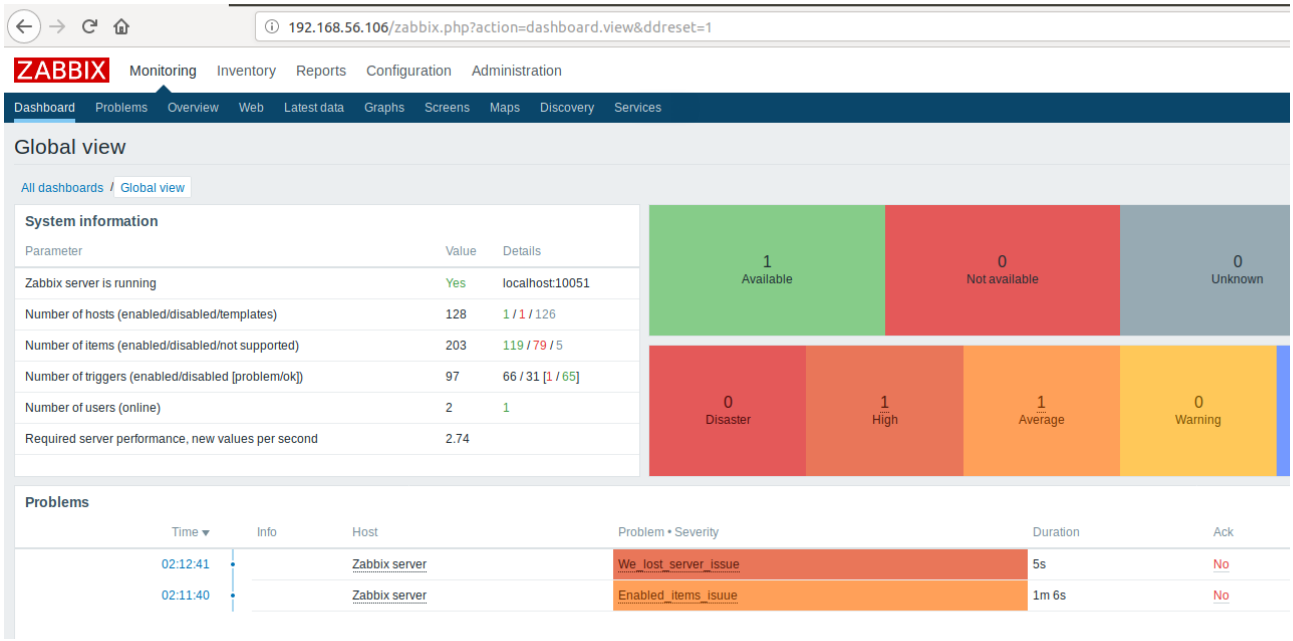


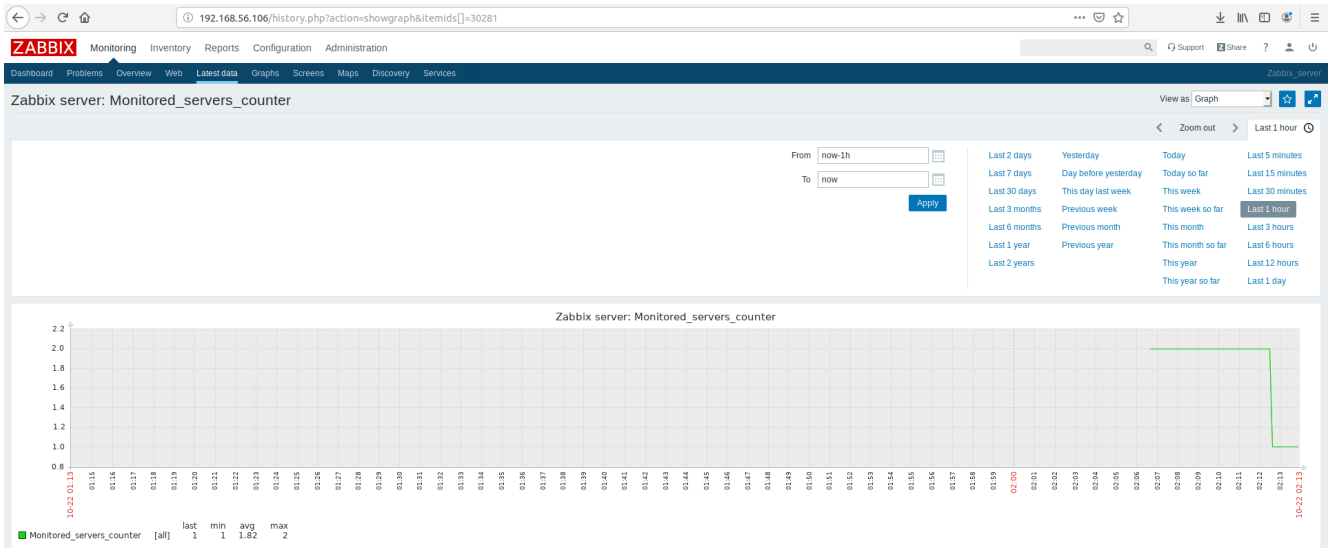







192.168.56.106/triggers.php?hostid=10084&form=create
ZABBIX
Monitoring Inventory Reports Configuration Administration
Host groups Templates Hosts Maintenance Actions Event correlation Discovery Services
Triggers
All hosts / Zabbix server Enabled ZBX SNMP JMX IPMI Applications 17 Items 127 Triggers 66 Graphs 21 Discovery rules 3 Web scenarios
Trigger Tags Dependencies
* Name We_lost_server_issue
Operational data
Severity Not classified Information Warning Average High Disaster
* Expression {Zabbix server:zabbix[hosts].diff()}=1
Add
Expression constructor
OK event generation Expression Recovery expression None


192.168.56.106/zabbix.php?action=dashboard.view&ddreset=1
ZABBIX
Monitoring Inventory Reports Configuration Administration
Dashboard Problems Overview Web Latest data Graphs Screens Maps Discovery Services
Global view
All dashboards / Global view
System information
Parameter Value Details
Zabbix server is running Yes localhost:10051
Number of hosts (enabled/disabled/templates) 128 1 / 1 / 126
Number of items (enabled/disabled/not supported) 203 119 / 79 / 5
Number of triggers (enabled/disabled [problem/ok]) 97 66 / 31 [1 / 65]
Number of users (online) 2 1
Required server performance, new values per second 2.74
1 Available
0 Not available
0 Unknown
0 Disaster
1 High
1 Average
0 Warning
Problems
Time Info Host Problem • Severity Duration Ack
02:12:41 Zabbix server We_lost_server_issue 5s No
02:11:40 Zabbix server Enabled_items_isuue 1m 6s No


192.168.56.106/history.php?action=showgraph&itemids[]=30281
ZABBIX
Monitoring Inventory Reports Configuration Administration
Dashboard Problems Overview Web Latest data Graphs Screens Maps Discovery Services
Zabbix server: Monitored_servers_counter
View as Graph
Zoom out
Last 1 hour
From now-1h
To now
Apply
Last 2 days Yesterday Today Last 5 minutes
Last 7 days Day before yesterday Today so far Last 15 minutes
Last 30 days This day last week This week Last 30 minutes
Last 3 months Previous week This week so far Last 1 hour
Last 6 months Previous month This month Last 3 hours
Last 1 year Previous year This month so far Last 6 hours
Last 2 years This year Last 12 hours
This year so far Last 1 day
Zabbix server: Monitored_servers_counter
Monitored_servers_counter [all] last 1 min 1 avg 1.82 max 2