

2

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0

Long, long time ago...

- 1.8 was released on 2009.12.07
- Work on the first new feature for 2.0 started at 2009.12.29
- It was "skip" mode for logfiles

How was Zabbix server called initially ?

zabbix_suckerd

StartSuckers=5

zabbix_suckerd #4 started

[Sucker. SNMP:OFF]

It's all in the name

- 1.10 or 2.0 ?
- The time had come

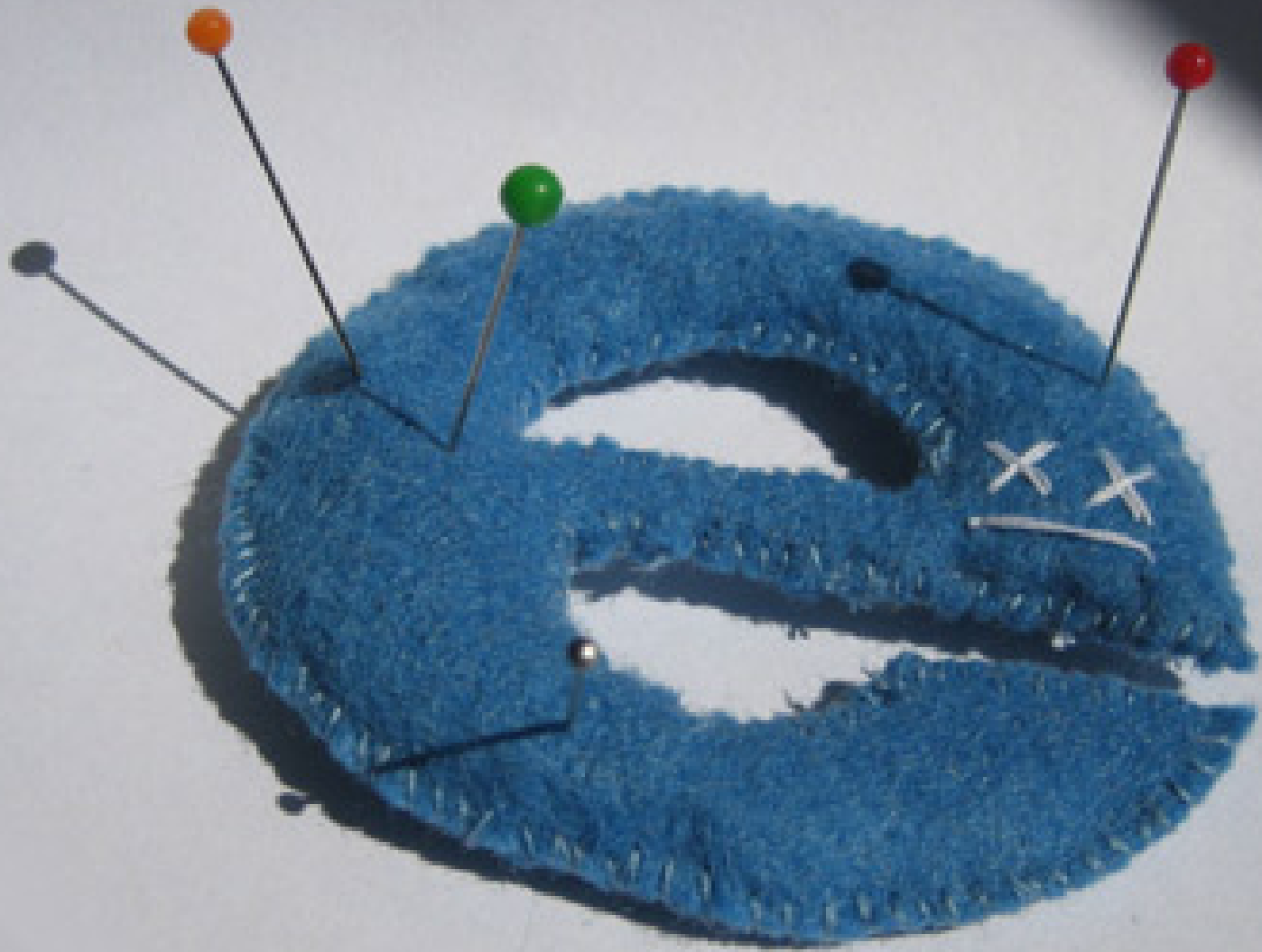
Today

- Frontend
- Performance
- Other notable new features

Who is using trunk ?
...in production ?

Frontend

- Changes all around
- Network map improvements



Zabbix frontend is built on advanced, modern technologies and does not support old browsers. It is highly recommended that you choose and install a modern browser. It is free of charge and only takes a couple of minutes.



Google Chrome
[Download page](#)



Mozilla Firefox
[Download page](#)



Internet Explorer
[Download page](#)



Opera browser
[Download page](#)



Apple Safari
[Download page](#)

Why is it recommended to upgrade the web browser?

New browsers usually come with support for new technologies, increasing web page speed, better privacy settings and so on. They also resolve security and functional issues.

[Continue despite this warning »](#)

[Help](#) | [Support](#)

The ZABBIX logo consists of the word "ZABBIX" in white, uppercase, sans-serif font, centered within a red rectangular box.

Username

Password

Remember me for 30 days

[Login as Guest](#)

Zabbix 1.9.7 Copyright 2001-2011 by Zabbix SIA

What was the default password for admin user before Zabbix 1.6 ?

Customisable dashboard

Host group	Disaster	High	Average	Warning	Information	Not classified
Linux servers	0	1	1	1	0	0
Zabbix servers	0	1	1	1	0	0

Updated: 13:25:57

Host group	Without problems	With problems	Total
Linux servers	1	1	2
Zabbix servers	0	1	1

Updated: 13:26:56

Host group	Ok	Failed	In progress	Unknown
			...	

Updated: 12:26:56

Favourite graphs
Zabbix.org: Available memory
Zabbix.org: Zabbix busy poller processes
Zabbix.org: Zabbix data gathering process busy %
Zabbix.org: Zabbix internal process busy %
Zabbix.org: Users in #zabbix on freenode
Zabbix.org: Zabbix 2.0 blocking issues

Graphs »

Favourite screens
Zabbix.org
Zabbix translation status

Screens »

Favourite maps
List is empty

Maps »

Parameter	Value	Details
Zabbix server is running	Yes	localhost:10051
Number of hosts (monitored/not monitored/templates)	8	2 / 0 / 6
Number of items (monitored/disabled/not supported)	209	151 / 57 / 1
Number of triggers (enabled/disabled)[problem/unknown/ok]	39	33 / 6 [3 / 0 / 30]
Number of users (online)	3	2
Required server performance, new values per second	1.03	-

Updated: 13:26:07

Host	Issue	Last change ↓↑	Age	Info	Actions
Zabbix.org	Lack of free memory on server Zabbix.org	29 Sep 2011 10:47:29	1h 39m 27s		1
Zabbix.org	Some items are not supported	26 Sep 2011 13:10:08	2d 23h 16m		-
Zabbix.org	Low free disk space on Zabbix.org volume /	26 Sep 2011 13:05:58	2d 23h 20m		-

3 of 3 issues are shown

Updated: 12:26:56

Reworked frontend

Action

Name

Event source

Enable escalations

Period (seconds) [min 60]

Default subject

Default message

Recovery message

Status

Action operations

<input type="checkbox"/>	Steps	Details	Period (sec)	Delay	Action
<input type="checkbox"/>	1	Send message to Group "Zabbix administrators"	Default	Immediately	<input type="button" value="Edit"/>

Action conditions

Type of calculation (A) and (B)

Conditions

(A) Trigger value = "PROBLEM"

(B) Maintenance status not in "maintenance"

Eliminates horizontal scrolling

Action	Conditions	Operations
Name	<input type="text"/>	
Period (minimum 60 seconds)	<input type="text" value="3600"/>	(seconds)
Default subject	<input data-bbox="910 703 1540 743" type="text" value="{TRIGGER.NAME}: {TRIGGER.STATUS}"/>	
Default message	<input data-bbox="910 751 1555 898" type="text" value="{TRIGGER.NAME}: {TRIGGER.STATUS}
Last value: {ITEM.LASTVALUE}

{TRIGGER.URL}"/>	
Recovery message	<input type="checkbox"/>	
Enabled	<input checked="" type="checkbox"/>	

Host properties in 1.8

Host [Zabbix server]

Name

Groups

In groups

Zabbix servers

Other groups

Discovered hosts
Linux servers
Templates
Windows servers

New group

DNS name

IP address

Connect to

Zabbix agent port

Monitored by proxy

Status

Use IPMI

Save Clone Full clone Delete Cancel

Linked templates

Template_App_Apache
 Template_App_MySQL
 Template_App_Syslog
 Template_Linux
 Template_Zabbix_Server

Add

Macros

Macro	Value
<input type="checkbox"/> {\$MACRO}	→ <Value>

Add Delete selected

Profile

Use profile

Device type

Name

OS

SerialNo

Tag

MAC Address

Hardware

Host properties in 2.0

Host	Templates	IPMI	Macros	Host inventory
	Template_App_Apache	Unlink	Unlink and clear	
	Template_App_MySQL	Unlink	Unlink and clear	
	Template_Gettext	Unlink	Unlink and clear	
	Template_Linux	Unlink	Unlink and clear	
	Template_Zabbix_Server	Unlink	Unlink and clear	
	Add			

[Save](#) [Clone](#) [Full clone](#) [Delete](#) [Cancel](#)

Navigation bar in host properties

« [Host list](#) **Host:** [Zabbix.org](#) **Monitored** Availability: **Available** [Applications](#) (19) [Items](#) (208) [Triggers](#) (49) [Graphs](#) (28) [Discovery](#) (0)





[Host](#) [Templates](#) [IPMI](#) [Macros](#) [Host inventory](#)

Template_App_Apache [Unlink](#) [Unlink and clear](#)
Template_App_MySQL [Unlink](#) [Unlink and clear](#)
Template_Gettext [Unlink](#) [Unlink and clear](#)
Template_Linux [Unlink](#) [Unlink and clear](#)
Template_Zabbix_Server [Unlink](#) [Unlink and clear](#)







[Add](#)

[Save](#) [Clone](#) [Full clone](#) [Delete](#) [Cancel](#)

Problem displaying customisation 1

Trigger displaying options		
	Colour	Blinking
Unacknowledged PROBLEM events	<input type="text" value="DC0000"/> 	<input type="checkbox"/>
Acknowledged PROBLEM events	<input type="text" value="DC0000"/> 	<input type="checkbox"/>
Unacknowledged OK events	<input type="text" value="00AA00"/> 	<input type="checkbox"/>
Acknowledged OK events	<input type="text" value="00AA00"/> 	<input type="checkbox"/>
Display OK triggers for	<input type="text" value="1800"/> seconds	
On status change triggers blink for	<input type="text" value="1800"/> seconds	

Problem displaying customisation 2

	Custom severity	Colour
Not classified	<input type="text" value="Not classified"/>	<input type="text" value="DBDBDB"/> 
Information	<input type="text" value="Information"/>	<input type="text" value="D6F6FF"/> 
Warning	<input type="text" value="Warning"/>	<input type="text" value="FFF6A5"/> 
Average	<input type="text" value="Average"/>	<input type="text" value="FFB689"/> 
High	<input type="text" value="High"/>	<input type="text" value="FF9999"/> 
Disaster	<input type="text" value="Disaster"/>	<input type="text" value="FF3838"/> 







Info Custom severity names affect all locales and require manual translation!

Save

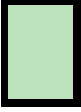
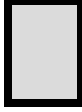
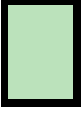
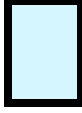
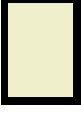
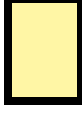
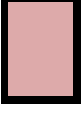
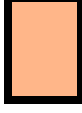
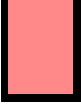
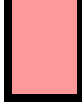


Reset defaults

Dutch version

- We're just jealous...

	Custom severity	Colour	
Not classified	High	DBDBDB	
Information	High	D6F6FF	
Warning	High	FFF6A5	
Average	High	FFB689	
High	High	FF9999	
Disaster	High	FF3838	

New colours

	1.8	2.0
Not classified		
Information		
Warning		
Average		
High		
Disaster		

Sort triggers in screens

Screen cell configuration ?

Resource

Host

Show lines

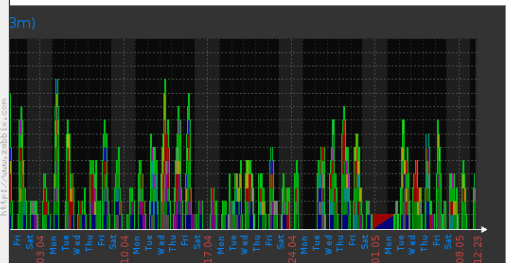
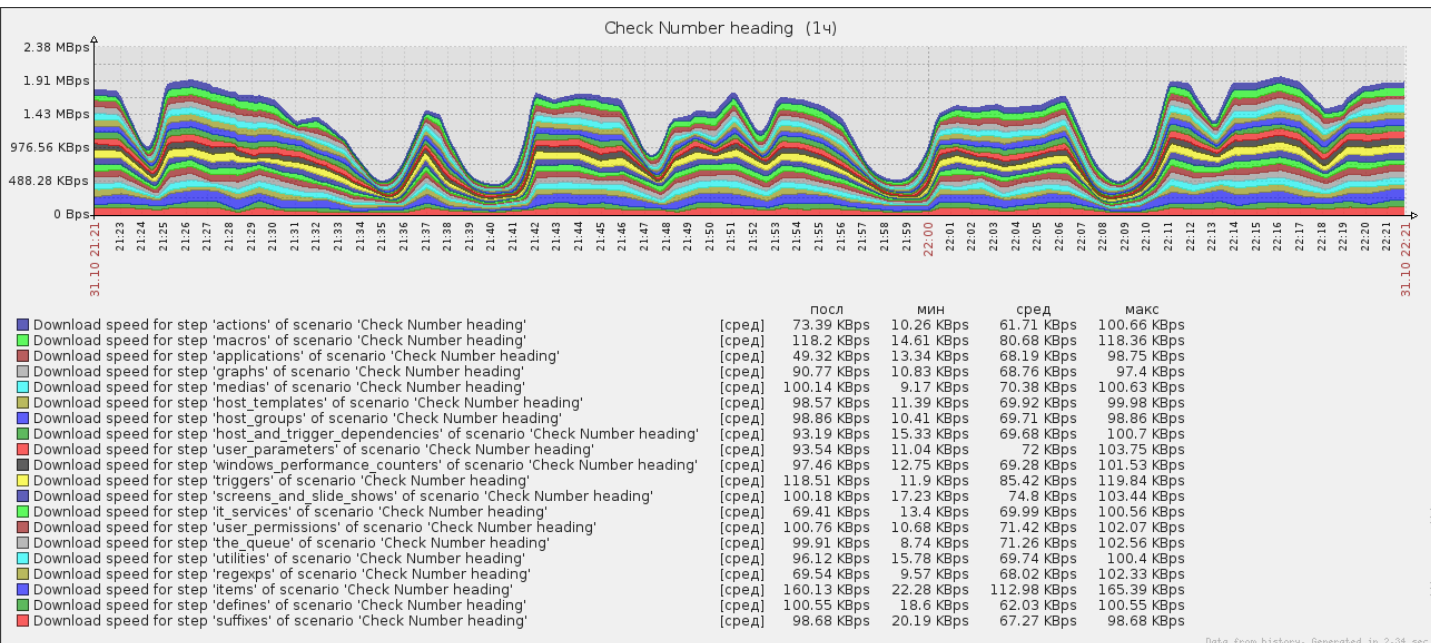
Sort triggers by

Vertical align

Column span

Row span

No legend



	last	min	avg	max
Aantal filters op de A348	0 controles	0 controles	0 controles	0 controles
Aantal filters op de A326	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A325	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A270	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A261	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A256	0 controles	0 controles	0 controles	0 controles
Aantal filters op de A200	0 controles	0 controles	0 controles	0 controles
Aantal filters op de A29	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A77	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A76	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A73	0 controles	0 controles	0.02 controles	2 controles
Aantal filters op de A67	0 controles	0 controles	0.01 controles	1 controles
Aantal filters op de A65	0 controles	0 controles	0 controles	0 controles
Aantal filters op de A59	0 controles	0 controles	0.02 controles	3 controles
Aantal filters op de A58	0 controles	0 controles	0.07 controles	3 controles
Aantal filters op de A50	1 controles	0 controles	0.04 controles	3 controles
Aantal filters op de A44	0 controles	0 controles	0.03 controles	2 controles
Aantal filters op de A32	0 controles	0 controles	0.05 controles	2 controles
Aantal filters op de A31	0 controles	0 controles	895 µcontroles	1 controles
Aantal filters op de A29	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A28	0 controles	0 controles	0.21 controles	4 controles
Aantal filters op de A27	0 controles	0 controles	0.1 controles	2 controles
Aantal filters op de A22	0 controles	0 controles	448 µcontroles	1 controles
Aantal filters op de A20	1 controles	0 controles	0.03 controles	2 controles
Aantal filters op de A17	0 controles	0 controles	0.01 controles	1 controles
Aantal filters op de A16	0 controles	0 controles	0.04 controles	2 controles
Aantal filters op de A15	0 controles	0 controles	0.07 controles	2 controles
Aantal filters op de A13	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A12	2 controles	0 controles	0.16 controles	2 controles
Aantal filters op de A10	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A9	0 controles	0 controles	0.03 controles	1 controles
Aantal filters op de A8	0 controles	0 controles	0 controles	0 controles
Aantal filters op de A7	0 controles	0 controles	0.04 controles	1 controles
Aantal filters op de A6	0 controles	0 controles	0.02 controles	2 controles
Aantal filters op de A5	0 controles	0 controles	0 controles	1 controles
Aantal filters op de A4	0 controles	0 controles	0.1 controles	2 controles
Aantal filters op de A2	0 controles	0 controles	0.2 controles	4 controles
Aantal filters op de A1	0 controles	0 controles	0.1 controles	3 controles

Data from trends, generated in 22.40 sec

Templated screens

- Add screens to a template
- View them on hosts

<input type="checkbox"/>	Template Gettext	Applications (1)	Items (55)	Triggers (0)	Graphs (18)	Screens (1)	Discovery (0)
--------------------------	----------------------------------	----------------------------------	----------------------------	------------------------------	-----------------------------	-----------------------------	-------------------------------

Is this media type actually used ?

<input type="checkbox"/>	<u>Description</u>	<u>Type</u>	Used in actions
<input type="checkbox"/>	<u>Email</u>	Email	a , action no user , action no user , some action , Test Action
<input type="checkbox"/>	<u>Jabber</u>	Jabber	a
<input type="checkbox"/>	<u>SMS</u>	SMS	-
<input type="checkbox"/>	<u>Test Script</u>	Script	SNMP Action
<input type="checkbox"/>	<u>ccc</u>	Email	action no user , integrity

Escalations = ON

- Escalations can not be disabled
- Trigger value = PROBLEM
- “Recovery message” becomes more intuitive

Visible host name

- Supports UTF8

Host name	dc12app427
Visible name	Liepāja, aplikāciju serveris

New and updated translations

- New translations
 - Turkish (php bug !)
- Updated translations
 - Dutch
 - French
 - German
 - Japanese
 - Latvian
 - Polish
 - Ukrainian
 - Russian

API access changes

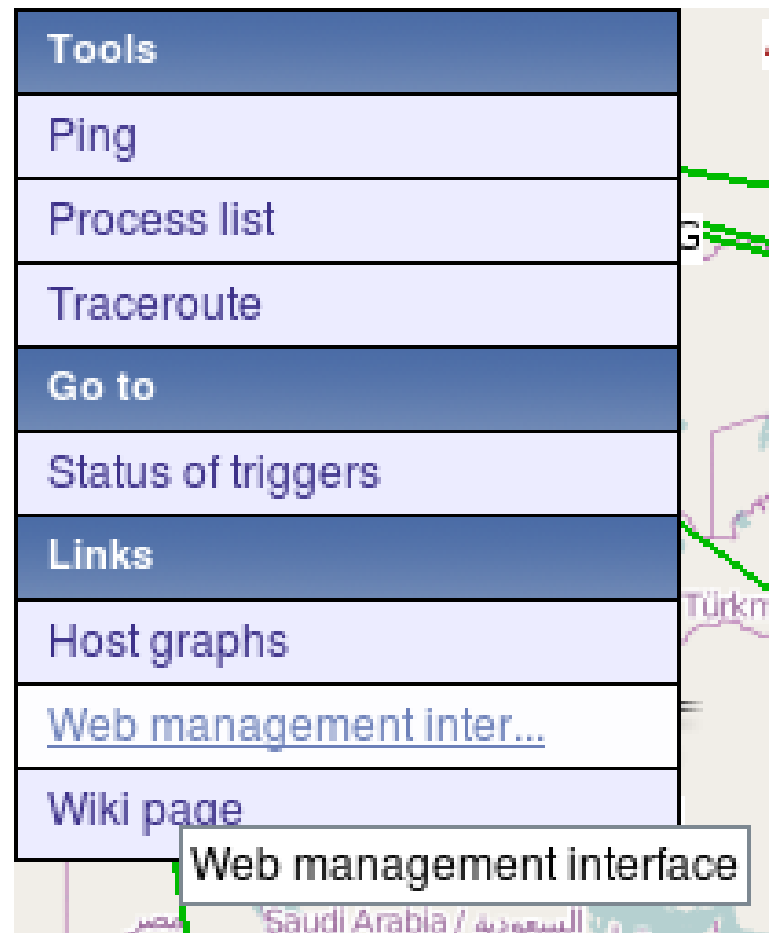
- Everybody has access to the API

Network map improvements

- General
- Editing

The URLs

- Before – one element, one URL
- Now – unlimited count, custom label and two levels
 - Map element level
 - Map level



Label type per element type

Advanced labels

Host group label type

Custom label ▼

Any dream^Wlabel will do

Host label type

IP address ▼

Trigger label type

Element name ▼

Map label type

Label ▼

Image label type








Nothing ▼

Icon mapping

Name

Some iconmap

Mappings

	Inventory field	Expression	Icon	
1:	Serial number A	^SG12	Notebook	 Remove
2:	Contract number	-123-	Phone	 Remove
3:	Tag	[0-9]+ Some Vendor	Hub	 Remove
4:	Asset tag	^UPS	UPS	 Remove
5:	Location	Riga	Workstation	 Remove
6:	OS	Linux	Server	 Remove
Add				
Default			Satellite	

Save

Clone

Delete

Cancel

Displaying hosts from a host group

Edit map element

Type

Show Host group
 Host group elements

Area type Fit to map
 Custom size

Area size Width Height

Network map improvements

- Editing

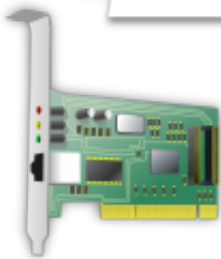
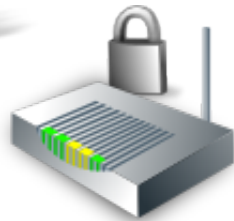
Grid selection saving

- Showing the grid
- Aligning to the grid
- Grid size

Select elements by dragging

- Yeeeeeah

New icons



Perform, 'dammit

Caching helps

- General config
- Triggers
- User macros

General caching

- General configuration caching
 - Global refresh periods
 - Discovery group
 - Custom severity names
 - ... other things

Trigger caching

- Most trigger detail cached
- Lots of triggers – less of an issue

User macro caching

- 1.8 – per individual daemon process
- 2.0 – global

Housekeeping...

...on PostgreSQL

Notable features

Database integrity

Nanosecond support

Goodbye, UNKNOWN

- UNKNOWN trigger state removed
- “Fuzzy” marker

Event export to CSV

- Export visible events

Inventory autopopulation

- Define which inventory field an item populates
- Any item type
- + inventory report

Inventory related items

- Hardware chassis details
- CPU frequency, vendor, model...
- PCI/USB device list
- MAC addresses
- Operating system name, architecture
- Installed package list

More items

- `system.localtime` – timestamp/human readable
- DNS items – Windows, remote servers, timeout, retry count...
- ...more

Skip the old

- Before – add logfile, kill server
- Now – keep server alive

Ability to send empty strings for custom checks

- Empty strings
- External – less hardcoding
- `vfs.file.contents[]`

What's it do ?

- Item descriptions

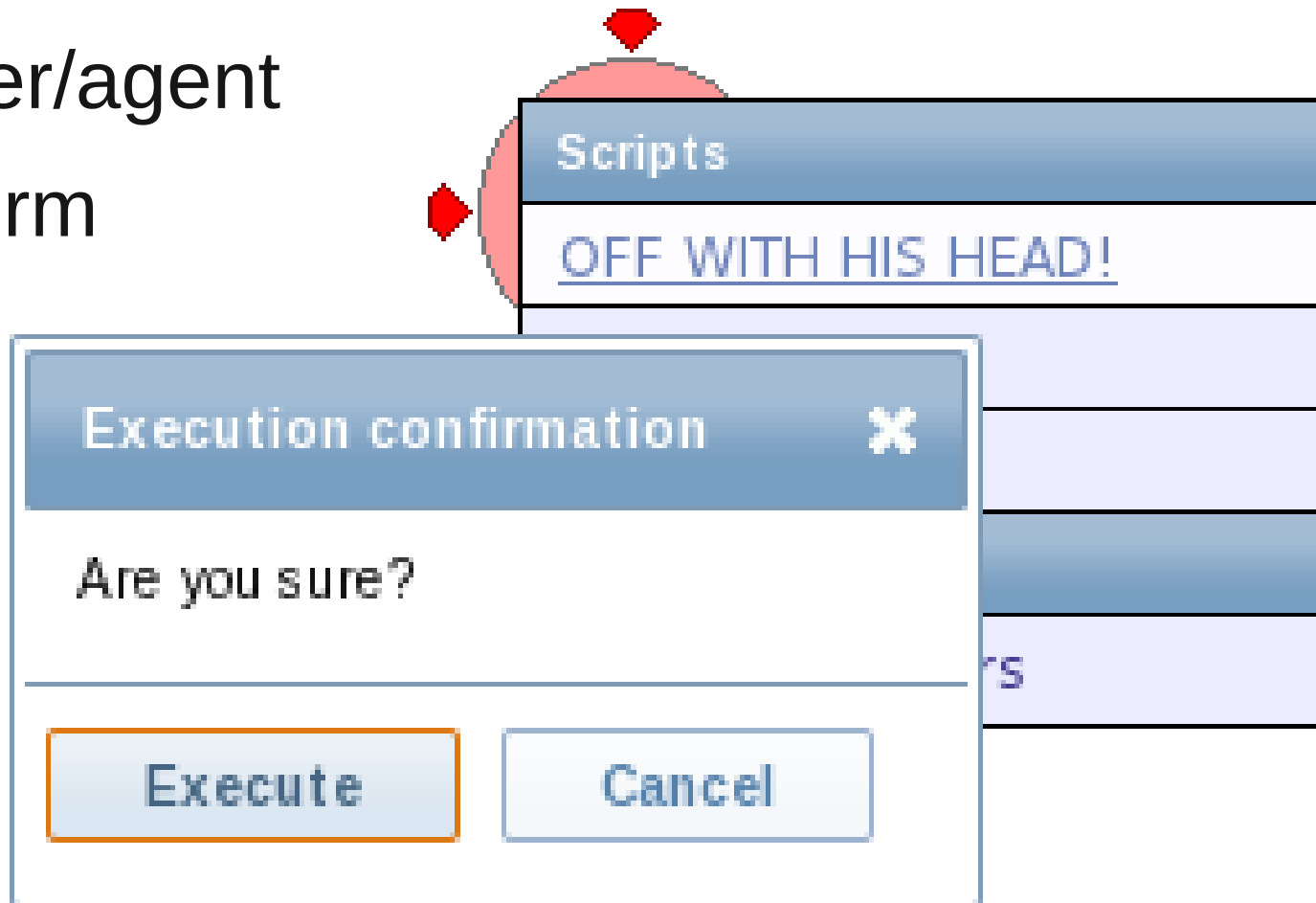
Multi-homed host support

Interfaces

IP address	DNS name	Connect to	Port	Type	
<input type="text" value="127.0.0.1"/>	<input type="text" value="zabbix.org"/>	<input type="button" value="IP"/> <input checked="" type="button" value="DNS"/>	<input type="text" value="10050"/>	<input checked="" type="button" value="Agent"/> <input type="button" value="SNMP"/> <input type="button" value="JMX"/> <input type="button" value="IPMI"/>	Remove
<input type="text" value="10.11.12.13"/>	<input type="text"/>	<input type="button" value="IP"/> <input type="button" value="DNS"/>	<input type="text" value="161"/>	<input type="button" value="Agent"/> <input checked="" type="button" value="SNMP"/> <input type="button" value="JMX"/> <input type="button" value="IPMI"/>	Remove
<input type="text" value="10.11.13.13"/>	<input type="text"/>	<input type="button" value="IP"/> <input type="button" value="DNS"/>	<input type="text" value="12345"/>	<input type="button" value="Agent"/> <input type="button" value="SNMP"/> <input checked="" type="button" value="JMX"/> <input type="button" value="IPMI"/>	Remove
<input type="text" value="10.113.80.13"/>	<input type="text"/>	<input type="button" value="IP"/> <input type="button" value="DNS"/>	<input type="text" value="623"/>	<input type="button" value="Agent"/> <input type="button" value="SNMP"/> <input type="button" value="JMX"/> <input checked="" type="button" value="IPMI"/>	Remove
Add					

Global scripts

- Server/agent
- Confirm



Remote commands

- Global scripts
- SSH / telnet
- On the server

Discovery & auto-registration

- DNS
- IP
- Port

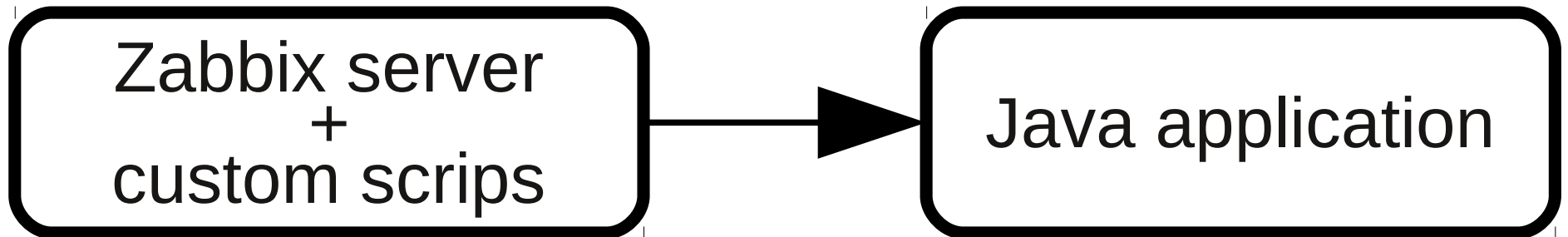
Integrate the trap

- Still uses snmptrapd
- Embedded Perl – faster
- No need for a custom script
- May use SNMP-TT

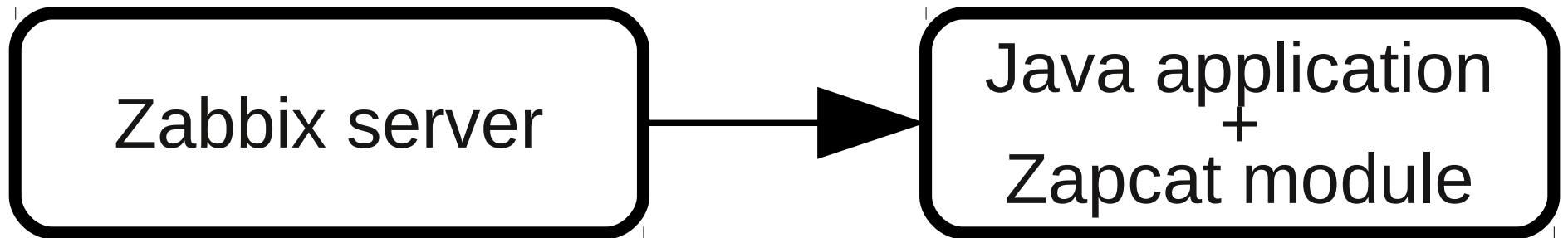
When the trapper was
integrated in the server ?

JMX: before

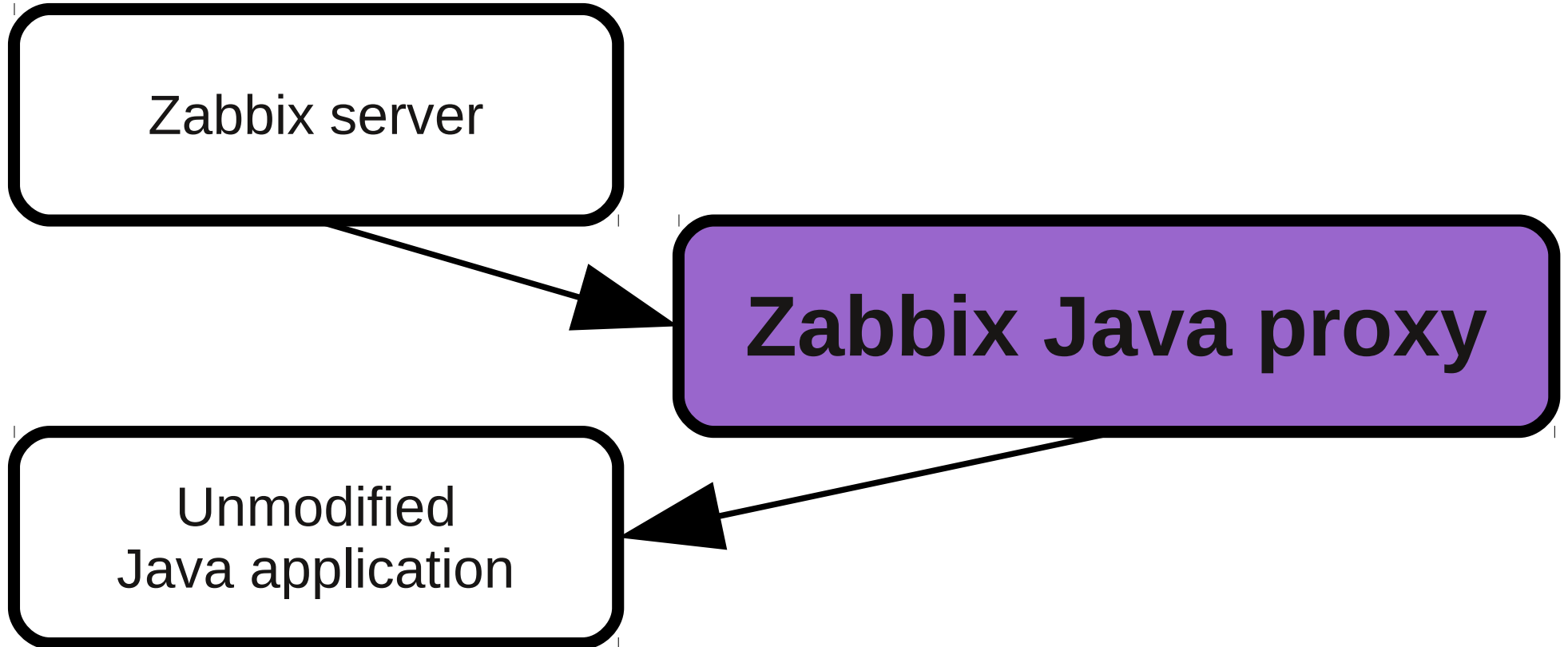
- Custom scripts



- Zapcat (Zabbix-Java bridge)



JMX: after



Boolean item type

- Translate text to number

→ 1	→ 0
true	false
t	f
yes	no
y	n
up	down
running	unused
enabled	disabled
available	unavailable

LLD

- What's that?

Can we define it?

- Multiples of things that differ per host

Built-in LLD: network

- Network interface discovery

Built-in LLD: filesystems

- Mounted filesystem discovery

Built-in LLD: SNMP

- Any MIB subtree
 - Network interfaces
 - Applications
 - ...anything

DNF

Hail the Duke

WHEN ?!11

When it's ready

When will it be ready ?

- Blockers
- Some 85 left

Thanks for surviving

- Other questions ?