

ZABBIX '25

CONFERENCE

BENELUX

GETTING CLOSER TO ZABBIX 8.0



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Founder, CEO



We help businesses deliver
flawless services for a
better world and happier people

Zabbix Cloud



Enterprise SaaS

7 tiers

5 regions



7 tiers for various needs

From SMBs to large enterprises

Nano: 50 NVPS, Micro: 100 NVPS, Small: 250 NVSP
Medium: 1K NVPS
Large: 2.5K NVPS, xLarge: 5K NVPS, 2xLarge: 10K

zabbix.com/cloud



Starts with 50\$ per month
No per metric, host, users, whatever fees!

zabbix.com/cloud

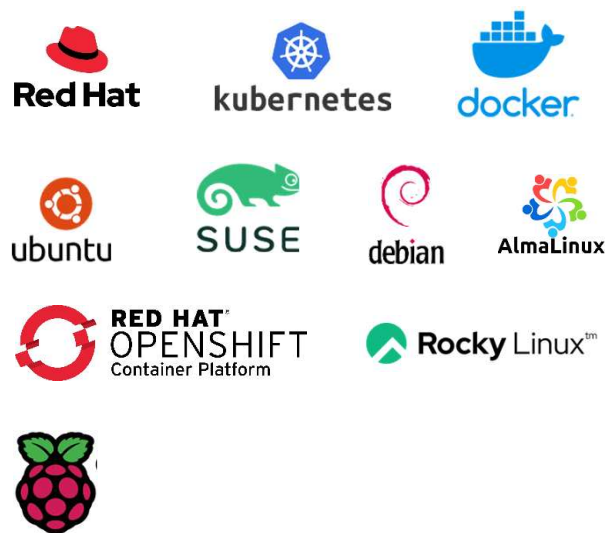


10GB are free forever

0.3\$ per extra GB per month

zabbix.com/cloud

ON-PREMISES



IN THE CLOUD



Zabbix Cloud (SaaS)



Advantages



Zabbix Cloud

Automatic upgrades and security patches

Automatic and on-request backups

Scale as you grow

Secure

Low TCO, no hidden cost

Fixed pricing for different levels of performance (NVPS) and storage requirements



Perfect for hybrid use

A combination with Zabbix Proxies

zabbix.com/cloud

How to start?

Go to:
zabbix.com/cloud

The screenshot shows the Zabbix Cloud login interface. At the top left is the ZABBIX logo with a cloud icon. The main heading is "Log in to your Zabbix Cloud Account". Below this are two input fields: one for email (containing "john.doe@zabbix.com") and one for password (masked with dots). There is a "Remember me" checkbox which is checked, and a "Forgot password?" link. A blue "Log in" button is positioned below the fields. At the bottom, there is a link: "Don't have an account? Sign up".

On the right side of the screenshot, there are four feature highlights, each with an icon and a brief description:

- 5 regions**: Select from 5 regions and choose the data center that best fits your organization.
- 7 tiers**: Pick a tier that fits your budget and monitoring requirements.
- Unlimited metrics**: Zabbix Cloud does not limit the type and number of metrics you can collect.
- Automatic updates**: It is our responsibility to keep your instances up to date and patched.

What's coming next?



2025 Q1/Q2

Pre-paid option

Support of organizations with user roles

2025 Q4

NIS2 compliance

SOC2 type 2 certification

Closer to Zabbix 8.0 LTS

Now in-between two LTS releases

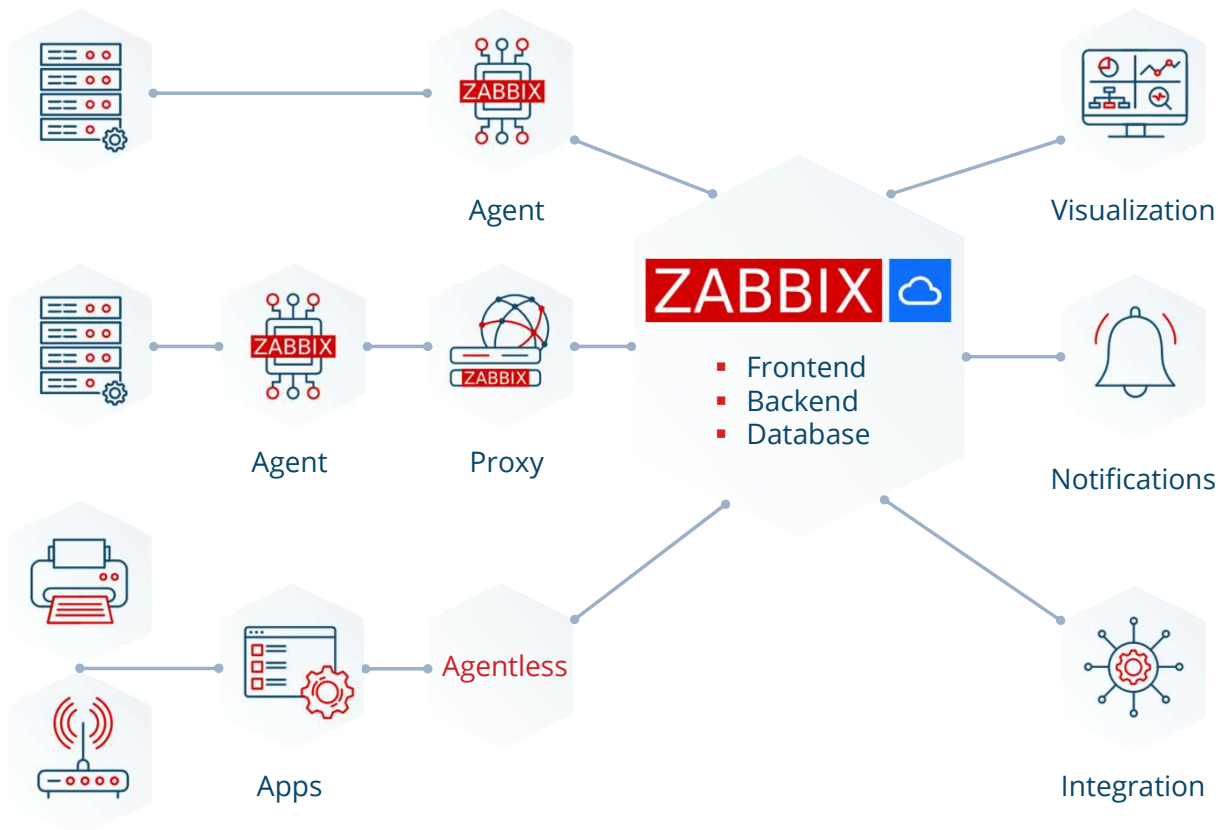
Staying open-source

An inclusive solution

An all-in-one solution

One product to cover it all

Collect ----> Analyze ----> React and Visualize



High-quality data for **AIOps**

Proxies for **DM and Edge computing**

API for automation and integrations

Auto-remediation

Anomaly detection

All levels: from infrastructure to business

IT & OT

Business services
SLA/SLI
Synthetic
Cloud
K8S
OpenShift
Containers
APIs
WEB
User experience
Applications
Processes
OS
Environment
Hardware
Industrial
Network devices
IoT and sensor data

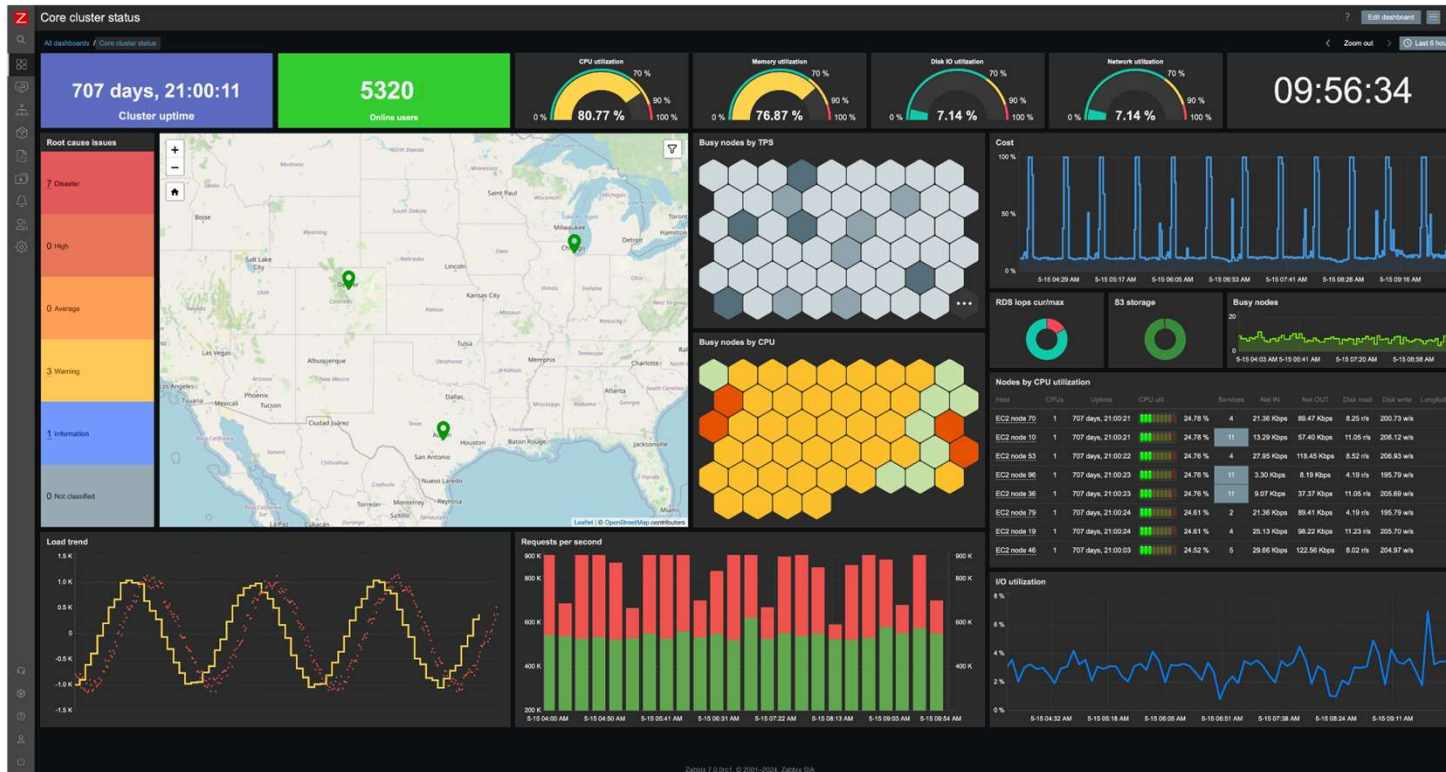
.NET	IC-Предприятие	Active Directory	ActiveMQ	Alcatel-Lucent Enterprise	Cloudstack	ClusterControl	X.Confluence	Cooling	CoreOS	HTTP	HTTPS	Huawei
Alerta	Android	ANSIBLE	Antivirus	Apache	Couchbase	cPanel	D-Link	Database monitoring	DATACOM	IBM AIX	IBM AS/400	IBM MQ
APC	Appdynamics	Application monitoring	Arduino	ARISTA	DB2	Debian	Dell	DNS	Docker	Ingress	Intel	InterSystems
aruba	Asterisk	AVAYA	amazon web services	AWS CloudWatch	Drupal	Elasticsearch	ellex	DELL EMC	EMERSON	IRC	Jabber	JasperReports
AWS EC2	AWS S3	Backup	Bacula	Barracuda	Exim	Extreme Networks	F5 Networks	Facebook Messenger	Fedora	JBoss	Jenkins	JIRA
Bigpanda	Blue Coat	bmc Remedy	BorgBackup	BROCADE	firebird	Firewalls	flowdock	FORTINET	FreeBSD	julia	JUNIPER	Kafka
BUFFALO	Bugzilla	C#	Capacity planning	Cassandra	FreshDesk	FUJITSU SIEMENS	MariaDB Galera Cluster	GECCKOBOARD	git	kubernetes	KVM	KYOCERA
Centos	ceph	Check Point	CHEF	Chrome extension	Glassfish	GLPI	GO	Google Apps	Google Cloud	Lenovo	Lexmark	Lighttpd
cisco	citrix	Cloud Foundry	Cloud monitoring	cloudera	Google Maps	Grafana	Graylog	Hadoop	HAPROXY	Logstash	Lucidworks	LXC
Cloudstack	ClusterControl	X.Confluence	Cooling	CoreOS	High Availability	Hipchat	HITACHI	HP Enterprise	hp UX	Mattermost	Mellanox	Memcached

zabbix.com/integrations

A single pane of glass

Total visibility and transparency

Visualization and reporting



Major improvements

All widgets for host and global dashboards and reporting

Stable framework for widget devs

A new set of advanced widgets

Dynamic dashboards for drill-down and specific use cases

Widgets for real-time viewing and reporting

Core widgets

Pie & donut charts

Gauge charts

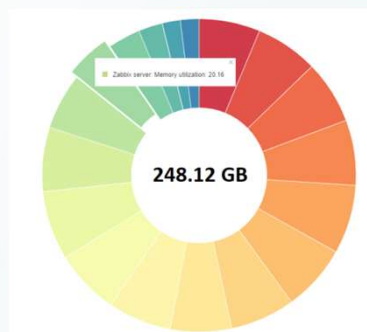
Item history



Reporting

Capacity reports

Management reports



Widgets navigators

Host navigator

Item navigator

Countries	
▶ Estonia	12 105
▼ Germany	3 3
Berlin	3 3
▶ Latvia	9 103
▶ USA	12 105

Advanced visualization

Honeycombs

Service trees

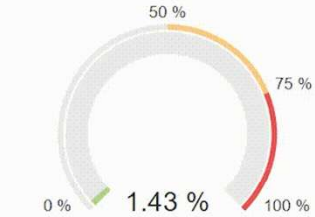
Topology



Resource utilization

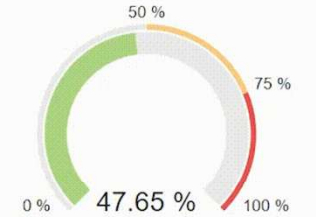


MySQL Node 1: Linux: CPU utilization



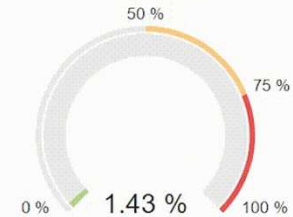
Linux: CPU utilization

MySQL Node 1: Linux: Memory utilization



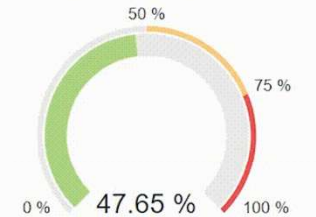
Linux: Memory utilization

MySQL Node 1: Linux: CPU utilization



Linux: CPU utilization

MySQL Node 1: Linux: Memory utilization



Linux: Memory utilization

App Node memory usage



Primary application node: Linux: Total memory
Primary application node: Linux: Available memory

Value
3.56 GB
2.14 GB

App Node CPU time



Primary application node: Linux: CPU user time
Primary application node: Linux: CPU iowait time
Primary application node: Linux: CPU system time

Value
0.4958 %
0.0984 %
0.4745 %

Top hosts

Host	CPU Utilization	Memory Utilization
Docker node 2	3.09 %	70.98 %
Docker node 1	3.09 %	60.83 %
Docker node 3	2.77 %	72.33 %
Web Nginx node 1	2.04 %	78.84 %
Web Apache node 1	1.93 %	57.73 %
Web Nginx node 2	1.93 %	47.55 %
Primary application node	1.88 %	44.50 %
Web Apache node 2	1.85 %	63.23 %
MySQL Node 2	1.48 %	65.38 %
MySQL Node 1	1.43 %	47.65 %



Filters

Filter by Severity
All Severities

Filter by Tags
Enter tags

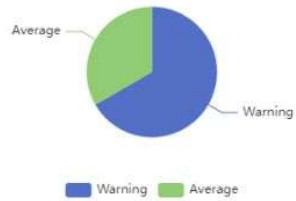
Filter by Date
Select date range

Filter by User
Enter user name

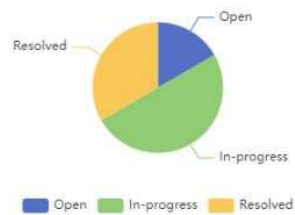
Filter by Hosts
Enter host name

Analytic

Incidents by Severity



Incidents by Status



Open

Warning

Incidente: SSL certificate expires soon (less than 7 days)
Host: www.facebook.com
Data de Abertura: 23/10/2024, 14:09:58
Duração: 5h 22m 40s

Tags e Valores: class: software component: cert scope: notice
target: certificate

Show Less

In Progress

Warning

Incidente: SSL certificate expires soon (less than 7 days)
Host: instagram.com
Data de Abertura: 23/10/2024, 11:00:16
Duração: 8h 32m 22s

Tags e Valores: class: software component: cert scope: notice
target: certificate

Último Ack: Zabbix

Add Comments

Average

Incidente: Zabbix agent is not available (for 3m)
Host: APP
Data de Abertura: 23/10/2024, 11:03:26
Duração: 8h 29m 12s

Tags e Valores: Aplicativo: Google class: os component: system
scope: availability target: linux

Último Ack: Zabbix

Add Comments

Average

Incidente: Zabbix agent is not available (for 3m)
Host: Banco de dados
Data de Abertura: 23/10/2024, 11:03:29
Duração: 8h 29m 9s

Tags e Valores: Aplicativo: Google class: os component: system
scope: availability target: linux

Último Ack: Zabbix

Add Comments

Show Less

Resolved

Warning

Incidente: SSL certificate expires soon (less than 7 days)
Host: www.facebook.com
Data de Abertura: 23/10/2024, 11:00:58
Data de Recuperação: 23/10/2024, 14:09:55
Último Ack: usr

Warning

Incidente: SSL certificate expires soon (less than 7 days)
Host: www.facebook.com
Data de Abertura: 23/10/2024, 10:59:58
Data de Recuperação: 23/10/2024, 11:00:35
Último Ack: Zabbix

Show Less

7.4: Dashboard editing improvements

Global view

The screenshot shows the Zabbix Global view dashboard. The main content area is partially obscured by an 'Edit widget' modal window. The modal is titled 'Edit widget' and contains the following configuration options:

- Type: Problems by severity
- Name: Problems by severity
- Refresh interval: Default (1 minute)
- Host groups: type here to search
- Exclude host groups: type here to search
- Hosts: type here to search
- Problem: (empty text field)
- Severity: Not classified, Warning, High, Information, Average, Disaster
- Problem tags: And/Or Or (radio buttons), tag: (input), Contains: (dropdown), value: (input), Remove: (button), Add: (button)
- Show: Host groups Totals (radio buttons)
- Layout: Horizontal Vertical (radio buttons)
- Show operational data: None Separately With problem name (radio buttons)
- Show suppressed problems:
- Hide groups without problems:
- Problem display: All Separated Unacknowledged only (radio buttons)
- Show timeline:

Buttons: Apply, Cancel

The background dashboard shows a 'Map navigation tree' on the left, a 'Top hosts by CPU utilization' chart, and a 'Problems by severity' bar chart. The bar chart shows 0 of 0 problems for each severity level: Disaster, High, Average, Warning, Information, and Not classified.

7.4: Item card widget

Item details

Latest data

Links to graphs

Tags

Host card ⚙️ ...

Zabbix server 🔑 1 1

Disabled

This is dummy host used for testing and developments purposes within the example.com network.

Host groups Linux servers, Application servers

📊 2 📄 2 📈 0 🌐 3

Availability ZBX IPMI JMX

Monitored by 🖨️ Zabbix server

Templates SpecialOne (Linux by Zabbix agent), SpecialTwo (Linux by SNMP)

Inventory

Type linux host

OS Linux version 6.5.0-25-generic...

Serial Number A 1155600023

MAC Address A 12:77:22:51:36:21

component: network server:isolated software:linux
class:os process:conversion component: network ...

Item card ⚙️ ...

Interface enp0s3: Inbound packets discarded 🔔 📄 1

Linux server 001 > Apache by HTTP

Cannot evaluate function: not enough data at "avg(/net.if.in ["enp0s3"],1m)".

Interval	History	Trends
15m 📄	7d	365d

Last check 1h 16m 40s Last value 64.2 Kbps Graph

Triggers 3 Interface enp0s8: Link down, Interface enp0s8: Ethernet ... [more](#)

Type of information Numeric (unsigned)

Host interface 192.168.127.1:10050

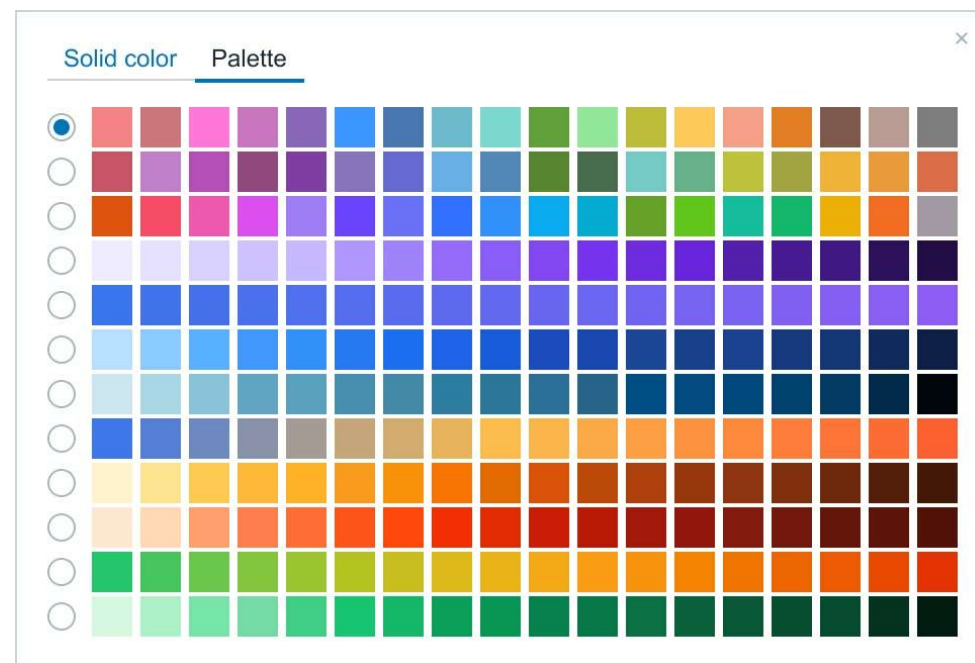
Type Zabbix agent

Host inventory field Type (Full details)

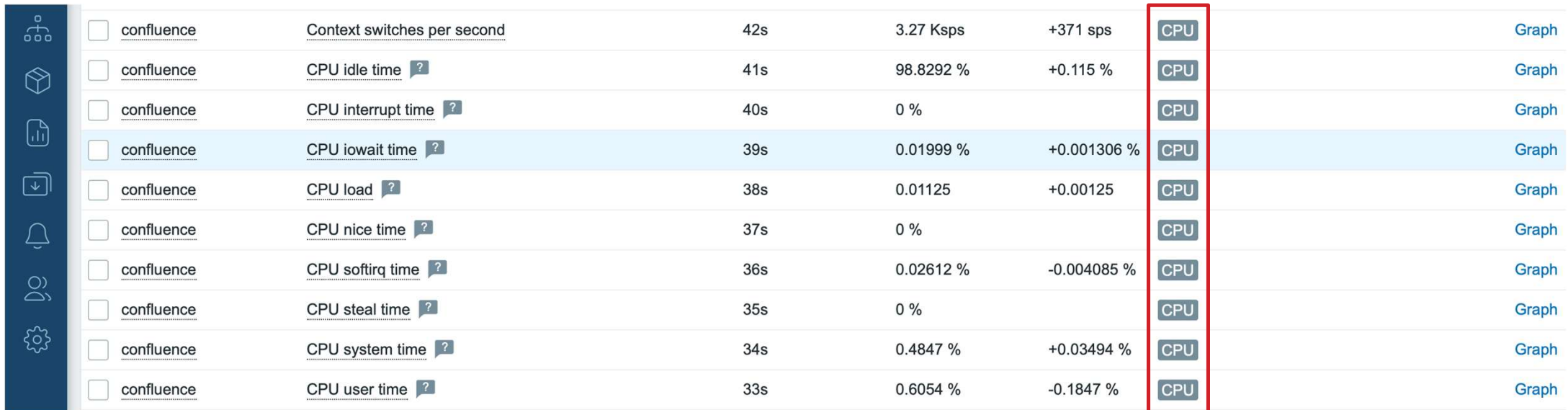
component: network server:isolated software:linux
class:os process:conversion component: network ...

7.4: Palette colors for graph widget

- Pre-defined colors for a set of metrics
- No need to manage colors for each metric
- Nice looking result with zero-configuration!



7.4: Respect template and host tags on item level



<input type="checkbox"/>	confluence	Context switches per second	42s	3.27 Ksps	+371 sps	CPU	Graph
<input type="checkbox"/>	confluence	CPU idle time ?	41s	98.8292 %	+0.115 %	CPU	Graph
<input type="checkbox"/>	confluence	CPU interrupt time ?	40s	0 %		CPU	Graph
<input type="checkbox"/>	confluence	CPU iowait time ?	39s	0.01999 %	+0.001306 %	CPU	Graph
<input type="checkbox"/>	confluence	CPU load ?	38s	0.01125	+0.00125	CPU	Graph
<input type="checkbox"/>	confluence	CPU nice time ?	37s	0 %		CPU	Graph
<input type="checkbox"/>	confluence	CPU softirq time ?	36s	0.02612 %	-0.004085 %	CPU	Graph
<input type="checkbox"/>	confluence	CPU steal time ?	35s	0 %		CPU	Graph
<input type="checkbox"/>	confluence	CPU system time ?	34s	0.4847 %	+0.03494 %	CPU	Graph
<input type="checkbox"/>	confluence	CPU user time ?	33s	0.6054 %	-0.1847 %	CPU	Graph

Filter and display also host and template tags

Show templates tags also for hosts

7.4: Widgets using host and template tags

Pie chart

host patterns Select item patterns Select ×

Aggregation function ? last ▾

Data set aggregation ? not used ▾

Data set label ?

Item tags And/Or Or Contains ▾ Remove

[Add](#)

Graph widget

Zabbix server × Select Number of processed values per second × Select ×

Draw Line Points Staircase Bar

Stacked

Width 1

Point size 3

Transparency 5

Fill 3

Missing data None Connected Treat as 0 Last known

Override host Select ▾

Y-axis Left Right

Time shift

Aggregation function not used ▾

Aggregation interval

Aggregate Each item Data set

Approximation avg ▾

Data set label ?

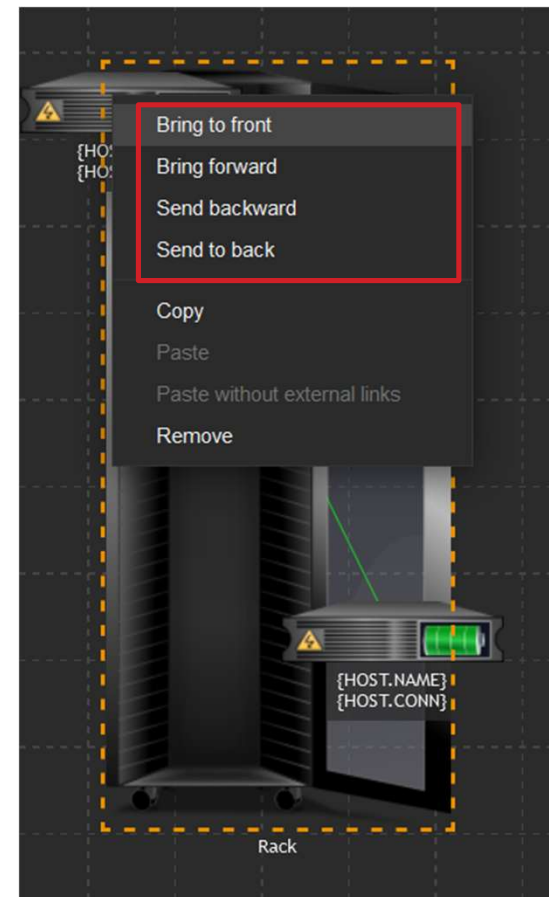
Item tags And/Or Or Contains ▾ Remove

[Add](#)

7.4: Map object re-ordering

Ability to re-order map elements:

- bring to front
- bring forward
- send backward
- send to back



7.4: New attributes for Maps

Auto hide option for labels

Background image to fit map size

Links	From	To	Link indicators	Action
	Server_(96)	Server_(96)	Pot still one (low-wines): Temperature	Edit

Label:

Show label: Default Always Auto hide

Type (OK):

Color (OK):

Indicator type: Static link Trigger Item value

* Item:

* Indicators

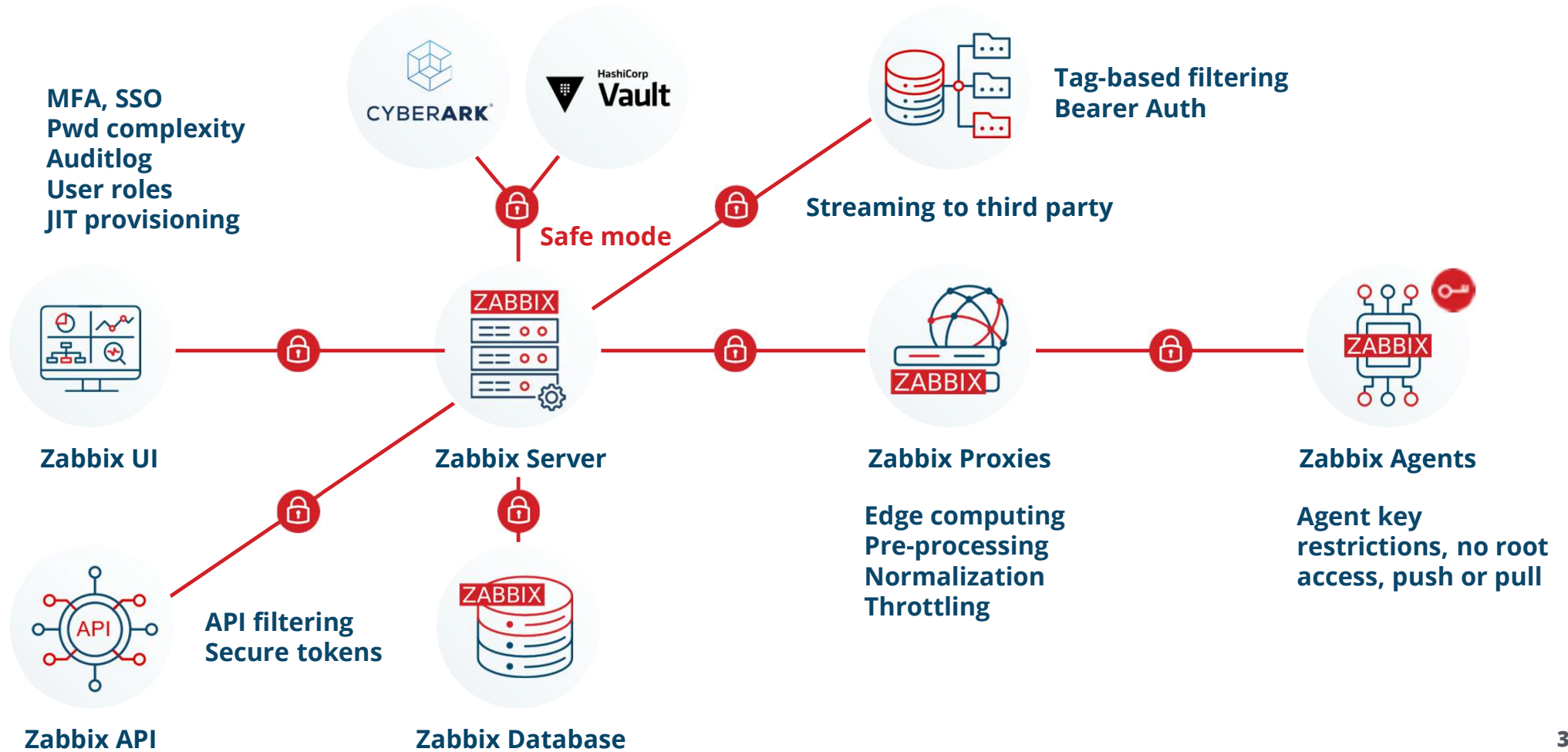
Threshold	Type
<input type="text" value="60"/>	<input type="text" value="Bold line"/> Remove

[Add](#)

Quality and security

Our top priority

The highest security standards



7.4: Encryption between Server and UI

Encryption between Zabbix UI and Server

Enables **encrypt all** option, no unencrypted connections are accepted



7.4: Support of OAuth 2.0

No basic authentication anymore



Support of OAuth for SMTP

New media type ? ×

Media type Authentication Message templates Options

Authentication type None Password OAuth

Redirection endpoint ? 📄

Client ID ?

Client secret ?

7.4: Secret macro resolution on proxies

Can be more secure

The screenshot shows the Zabbix configuration interface for the 'Storage of secrets' section. The 'Vault provider' is set to 'HashiCorp Vault'. The 'Resolve secret vault macros by' dropdown is currently set to 'Zabbix server'. A tooltip is displayed over this dropdown, explaining the two options: 'Zabbix server' (secrets are retrieved from Vault by Zabbix server and forwarded to proxies when needed) and 'Zabbix server and proxy' (secrets are retrieved from Vault by both Zabbix server and proxies, allowing them to resolve macros independently). Other visible settings include 'Frontend URL' (Example: https://localhost/zabbix/ui/), 'Group for discovered hosts' (Discovered hosts), 'Default host inventory mode' (Disabled), 'User group for database down message' (Zabbix administrators), 'Log unmatched SNMP traps' (checked), 'Authorization' (Login attempts: 5, Login blocking interval: 30s), 'Validate URI schemes' (checkbox), and '* Use X-Frame-Options HTTP header' (checkbox, SAMEORIGIN). 'Update' and 'Reset defaults' buttons are at the bottom.

Scalability and performance

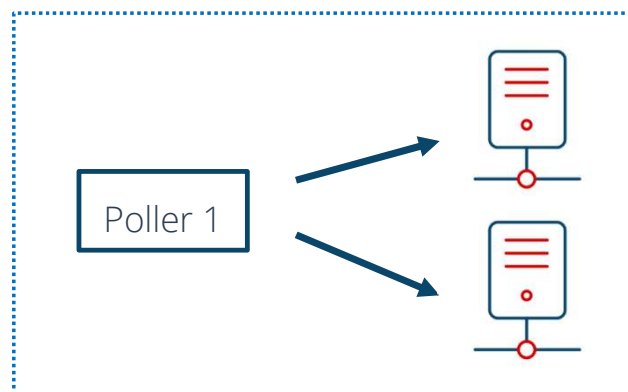
Lower TCO

Performance: transition to async & threads

7.0 LTS



Zabbix Server



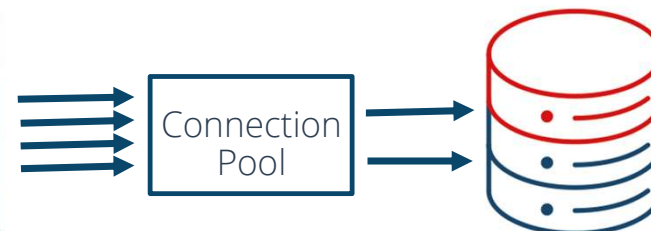
Thousands of connections per poller

One poller/discoverer to handle **thousands of connections**

Much lower resource usage = lower costs and energy use

Enables **auto-scaling** in the future

7.4



Enables full transition to threads in the future

Other improvements

Preparing for bigger changes

7.4: Nested/cascaded LLD



One of the most top voted requests

▼ Sam Potekhin added a comment - 2024 Aug 06 09:32 - edited

Yet another case:

How to monitor RAID controller:

1. Discover controllers (in case of HP - `ssacli ctrl all show`, storcli - `storcli show`) - we got controllers names with its numbers.
2. On every controller discover following things: logical disks, physical disks (not used or hotspares), arrays.
3. On every logical/physical disk retrieve info about it and place them into items.
4. Every thing from p.1, p.2 and p.3 have it's own items.

Why not make possible create discovery rule depended on another discovery rule?
Currently only dependency on regular item is available.

Edit · Delete · Pin

Enables:

Multi-level discovery based on structured data

Next generation "smarter" templates for discovery and data collection

Simplifies integration with Configuration and Asset Management systems

7.4: Host wizard

Step by step guidance

Clear instructions

Integrated with templates

Select a template Create or select a host A few more steps

Select a template

A **template** is a set of predefined configurations (metrics to be collected, conditions for generating alerts, etc.) designed for your monitoring target.

Type a keyword to search for templates.

Data collection Agent mode

All Agent-based Agentless All Active Passive

Templates

Applications (86)

Aranet Cloud by JMX

Tags: `target: cloud` `target: gcp` `target: cloud` `target: cloud` `target: cloud` `target: cloudsql`

Show more

Apache by HTTP

Tags: `target: cloud` `target: gcp` `target: cloudsql` `target: cloudsql` `target: cloudsql` `target: gcp`

Show more

Apache

Tags: `target: cloud` `target: cloud` `target: cloud` `target: gcp` `target: cloudsql` `target: gcp`

Show more

Apache Tomcat by JMX

Tags: `target: gcp` `target: cloud` `target: cloudsql` `target: cloudsql`

Show more

Aranet Cloud

Tags: `target: cloud` `target: cloudsql` `target: gcp` `target: gcp` `target: gcp`

Show more

Memcached by Zabbix agent 2

Tags: `target: rt` `target: cloud` `target: rt` `target: yu` `target: cloudsql` `target: rt`

Show more

7.4: New macros and functions

Macros

{ITEM.VALUE.DATE}

{ITEM.VALUE.TIME}

{ITEM.VALUE.TIMESTAMP}

{ITEM.VALUE.AGE}

{ITEM.LASTVALUE.DATE}

{ITEM.LASTVALUE.TIME}

{ITEM.LASTVALUE.TIMESTAMP}

{ITEM.LASTVALUE.AGE}

Functions

lastclock(/host/key, <#num<:time shift>>)

firstclock(/host/key, sec<:time shift>)

7.4: Inline form validation

New host [?] [X]

Host IPMI Tags Macros Inventory Encryption Value mapping

* Host name
Incorrect characters used for host name.

Visible name

Templates

* Host groups
This field cannot be empty.

Interfaces	Type	IP address	DNS name	Connect to	Port	Default
SNMP		<input type="text" value="192.168.0.256"/> IP address: Invalid IP address.		<input type="button" value="IP"/> <input type="button" value="DNS"/>	<input type="text" value="161"/>	<input checked="" type="radio"/> <input type="button" value="Remove"/>

* SNMP version

* SNMP community

Max repetition count
This value must be within range 1:2147483647.

Use combined requests

[Add](#)

Description

Monitored by

This field cannot be empty.

R&D works on Zabbix 8.0 LTS

R&D	Data processing	Visualization and reporting
APM	APM and tracing functionality	Visualization of complex data: tracing, flows, etc
Event correlation engine	OpenTelemetry	Widgets for advanced visualization
Management functions	Topology data	Custom UI for any use case
Enhanced network monitoring	Processing of network streaming data	Framework for widget development
Massive usability improvements	Tracing, events, logs, binary	

Zabbix 7.4

Zabbix 8.0 LTS

ZABBIX '25 CONFERENCE

BENELUX

THANK YOU!

Alexei Vladishev
Founder, CEO

uplink: outgoing

2.12 Kbps

