ZABBIX SUMMIT 2024

ZABBIX, CLOUD, FREEDOM

Alexei Vladishev

Founder and CEO,
Zabbix

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

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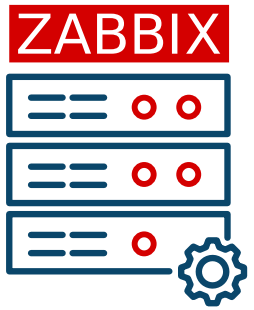
We want to be **100%** focused on monitoring and our systems

In reality...



Zabbix Server

Dealing with upgrades

Keeping Zabbix up-to-date

Applying security patches

Performance tuning

Database related tuning, partitioning

Backups

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Zabbix Cloud! 🎉 🎉 🎉

Enterprise SaaS **7 tiers** **5 regions**

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ZABBIX

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 NVPS

zabbix.com/cloud

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ZABBIX

Starts with **50$** per month

No per metric, host, users, whatever fees!

zabbix.com/cloud

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ZABBIX

10GB are free forever

0.3$ per extra GB per month

zabbix.com/cloud

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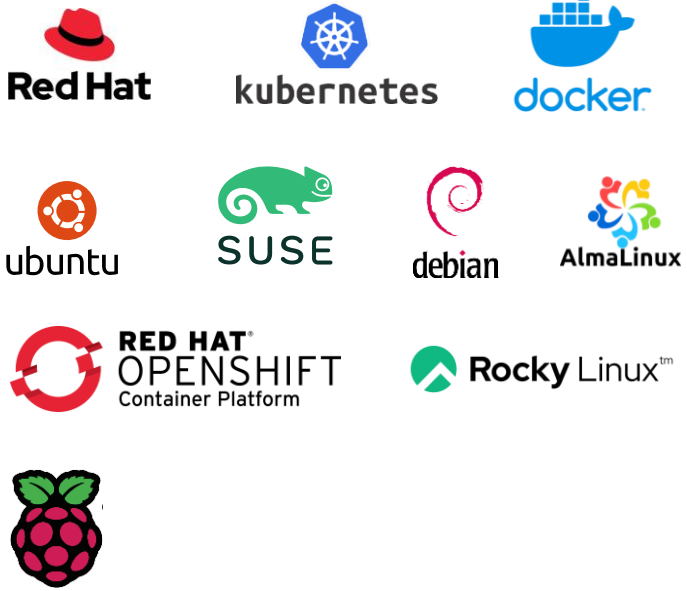
ON-PREMISES



IN THE CLOUD

Zabbix Cloud (SaaS)

ZABBIX

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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

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Perfect for hybrid use

A combination with Zabbix Proxies

zabbix.com/cloud

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Great solution for MSPs

Run Zabbix instance per customer

zabbix.com/cloud

How to start?

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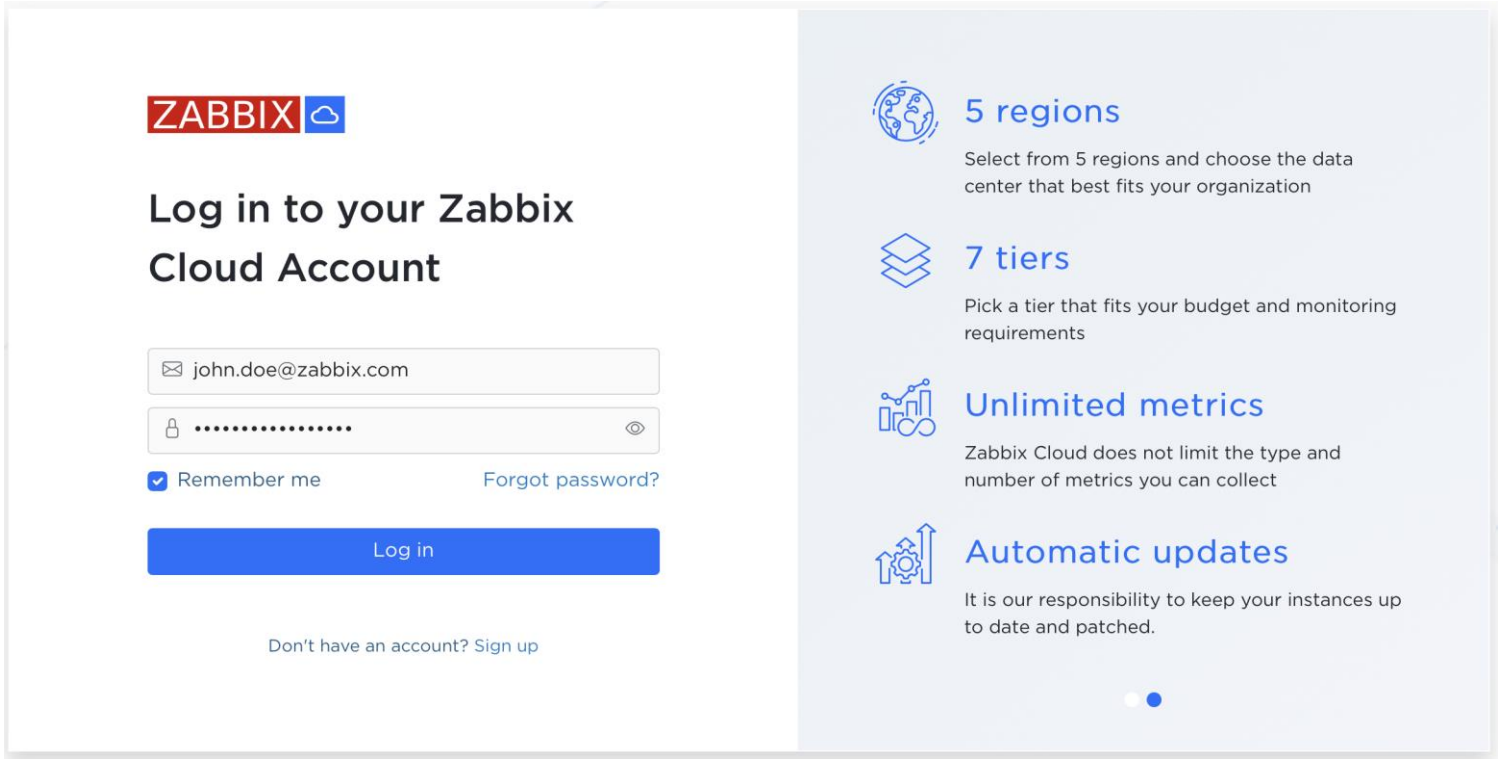
Go to:

zabbix.com/cloud

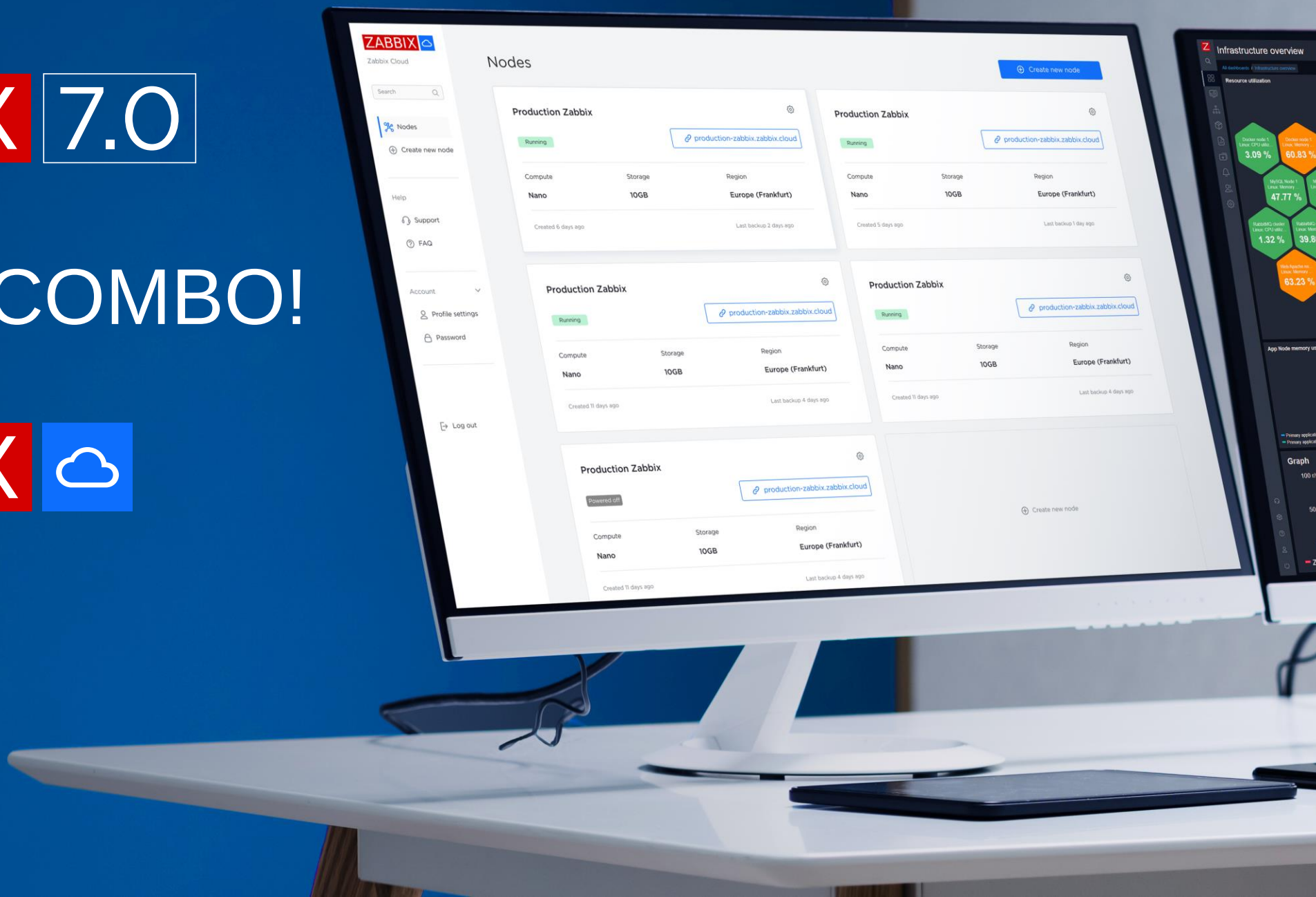


ZABBIX 7.0

A GREAT COMBO!

ZABBIX

Zabbix in the Cloud



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Zabbix 7.0 LTS

More than 110 new features and improvements

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Staying open-source

An inclusive solution

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GPLv2 -> AGPLv3

Does it make any difference?

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An all-in-one solution

One product to cover it all

Collect ⇢ Analyze ⇢ React and Visualize

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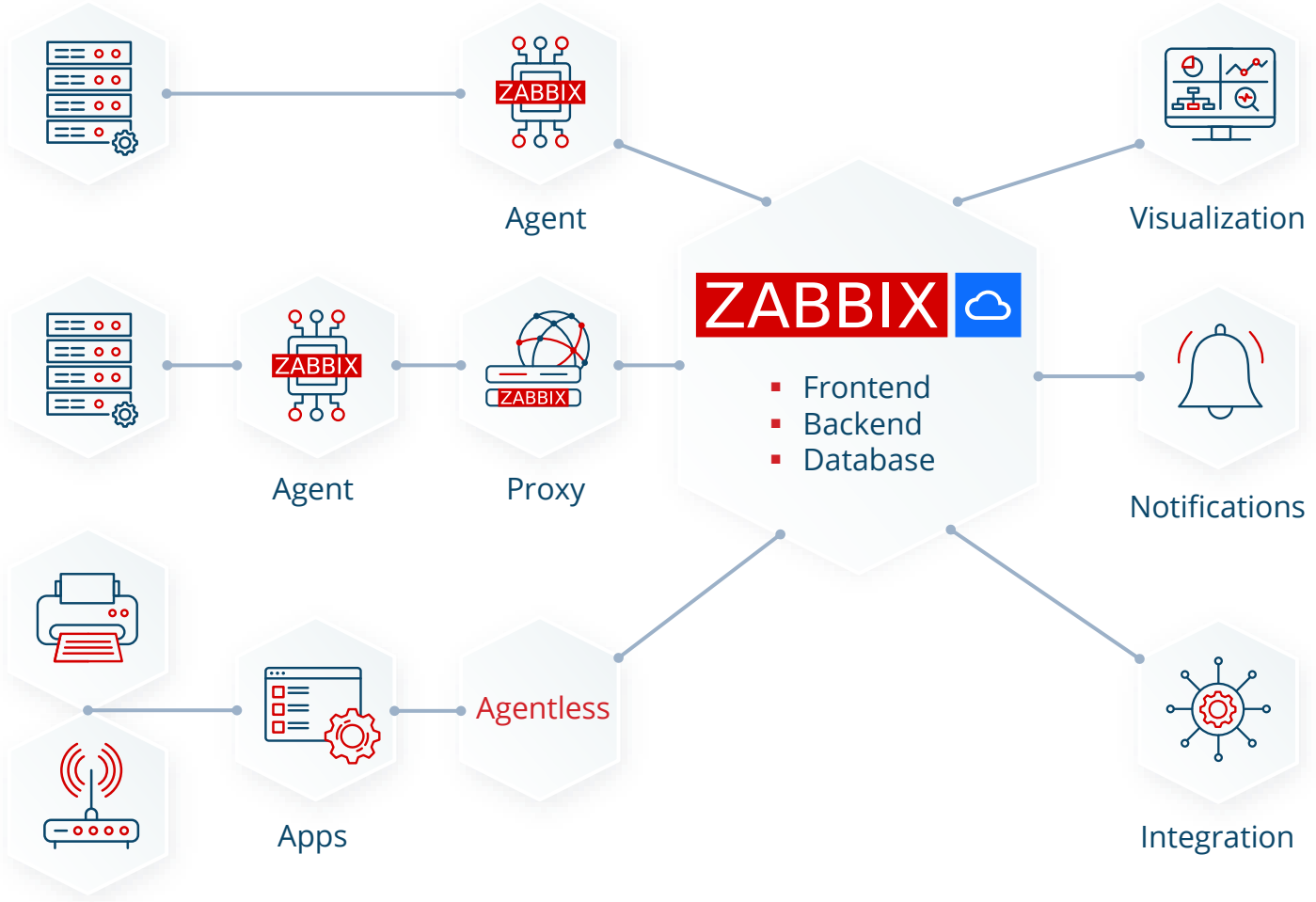

High-quality data, also for AIOps

Proxies for DM and Edge computing

API for automation and integrations

Auto-remediation

Anomaly detection

All levels: from infrastructure to business

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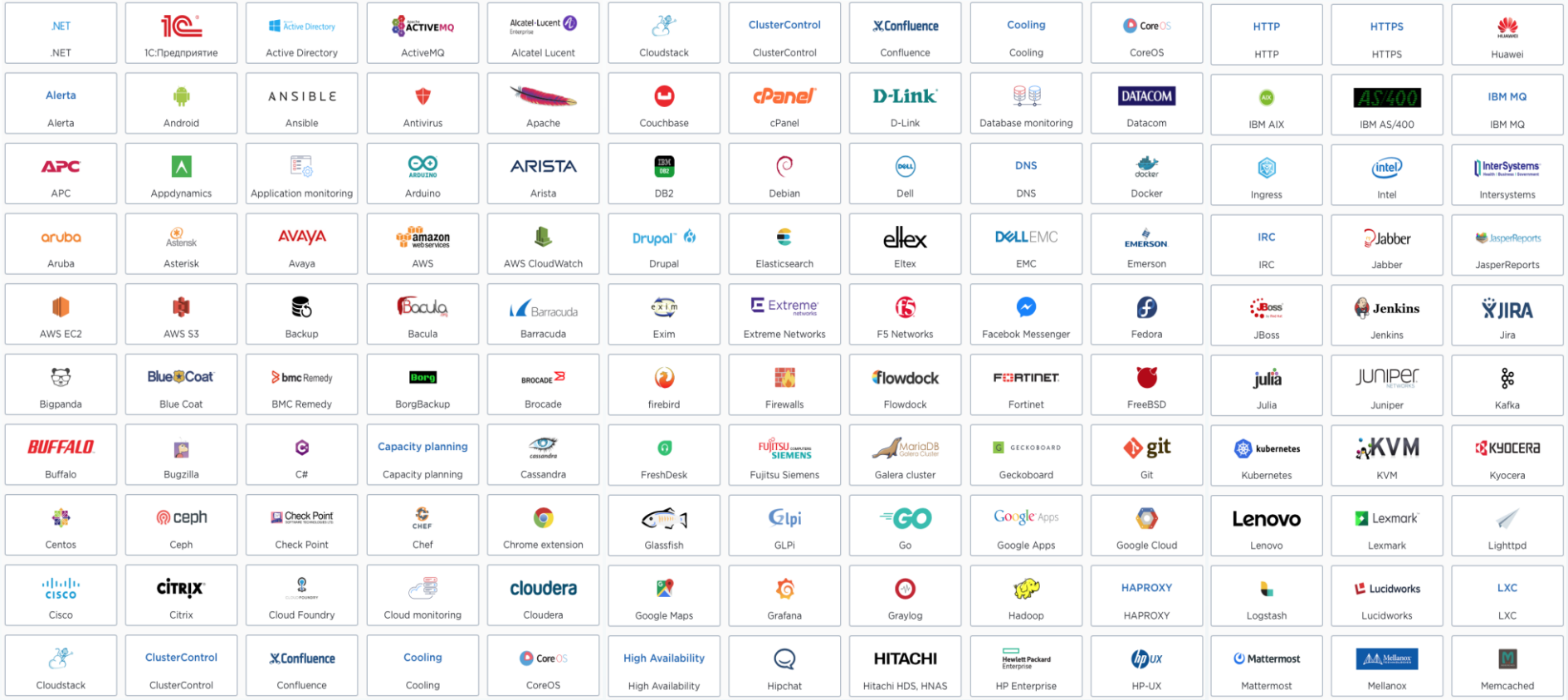
IT & OT
Business services
SLA/SLI
Synthetic
Cloud
K8S
OpenShift
Containers
APIs
WEB
User experience
Applications
Processes
OS
Environment
Hardware
Industrial
Network devices
IoT and sensor data



zabbix.com/integrations

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A single pane of glass

Total visibility and transparency

Visualization and reporting

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Zabbix 7.0 LTS

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

New widgets for real-time viewing and reporting

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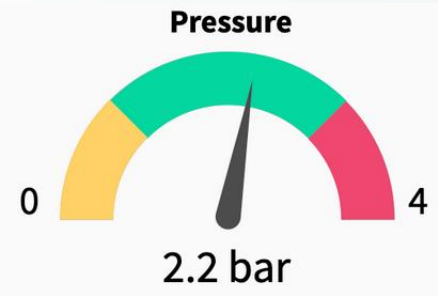
Core widgets

Pie & donut charts

Gauge charts

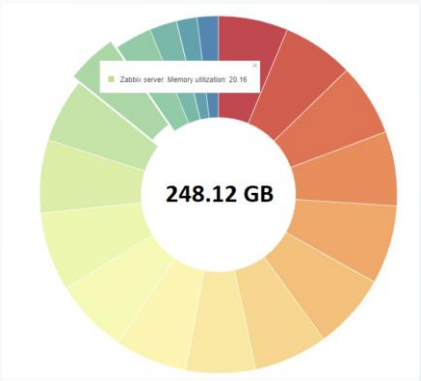
Item history



Reporting

Capacity reports

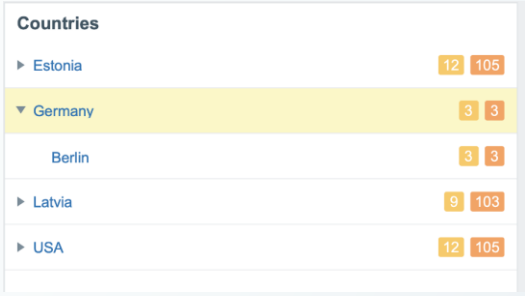
Management reports



Widgets navigators

Host navigator

Item navigator



Advanced visualization

Honeycombs

Service trees

Topology

Infrastructure overview

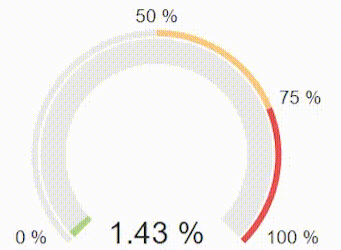
All dashboards / Infrastructure overview

Zoom o

Resource utilization

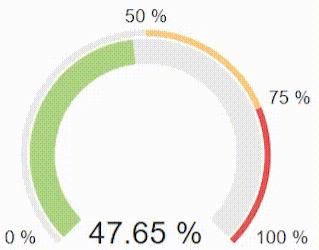
Docker node 1 Linux: CPU utiliz... 3.09 %	Docker node 1 Linux: Memory ... 60.83 %	Docker node 2 Linux: CPU utiliz... 3.09 %	Docker node 2 Linux: Memory ... 70.98 %	Docker node 3 Linux: CPU utiliz... 2.77 %	Docker node 3 Linux: Memory uti... 72.33 %	MySQL Node 1 Linux: CPU utiliz... 1.43 %
MySQL Node 1 Linux: Memory ... 47.65 %	MySQL Node 2 Linux: CPU utiliz... 1.48 %	MySQL Node 2 Linux: Memory ... 65.38 %	MySQL Node 3 Linux: CPU utiliz... 1.18 %	MySQL Node 3 Linux: Memory ... 37.18 %	Primary applicati... Linux: CPU utiliz... 1.88 %	Primary applicat... Linux: Memory ... 44.50 %
RabbitMQ cluster Linux: CPU utiliz... 1.42 %	RabbitMQ cluster Linux: Memory ... 39.81 %	Secondary appli... Linux: CPU utiliz... 1.10 %	Secondary appli... Linux: Memory ... 53.00 %	Web Apache no... Linux: CPU utiliz... 1.93 %	Web Apache no... Linux: Memory ... 57.73 %	Web Apache no... Linux: CPU utiliz... 1.85 %
Web Apache no... Linux: Memory ... 63.23 %	Web Nginx node 1 Linux: CPU utiliz... 2.04 %	Web Nginx node 1 Linux: Memory ... 78.84 %	Web Nginx node 2 Linux: CPU utiliz... 1.93 %	Web Nginx node 2 Linux: Memory ... 47.55 %	Zabbix server Linux: CPU utiliz... 1.23 %	Zabbix server Linux: Memory ... 39.59 %

MySQL Node 1: Linux: CPU utilization



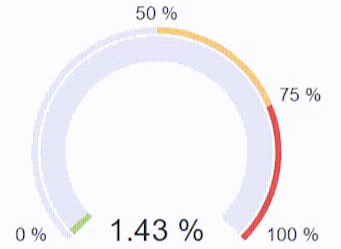
Linux: CPU utilization

MySQL Node 1: Linux: Memory utilization



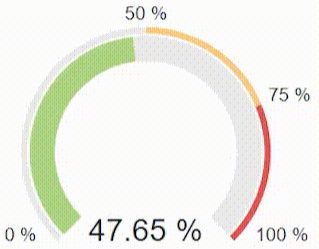
Linux: Memory utilization

MySQL Node 1: Linux: CPU utilization



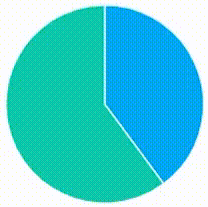
Linux: CPU utilization

MySQL Node 1: Linux: Memory utilization



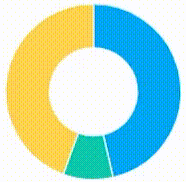
Linux: Memory utilization

App Node memory usage



	Value
Primary application node: Linux: Total memory	3.56 GB
Primary application node: Linux: Available memory	2.14 GB

App Node CPU time

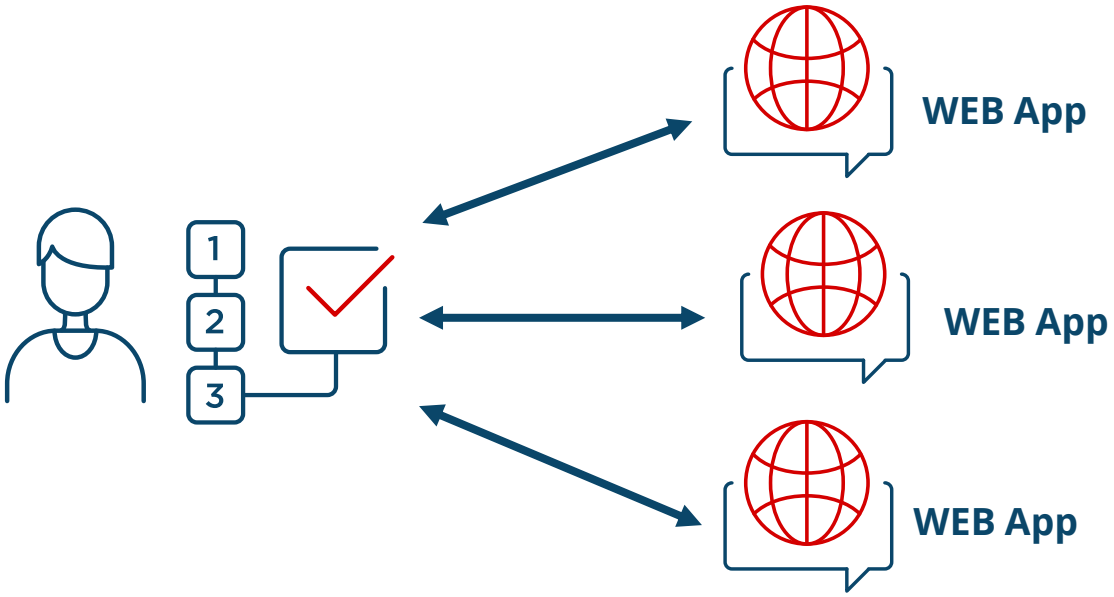


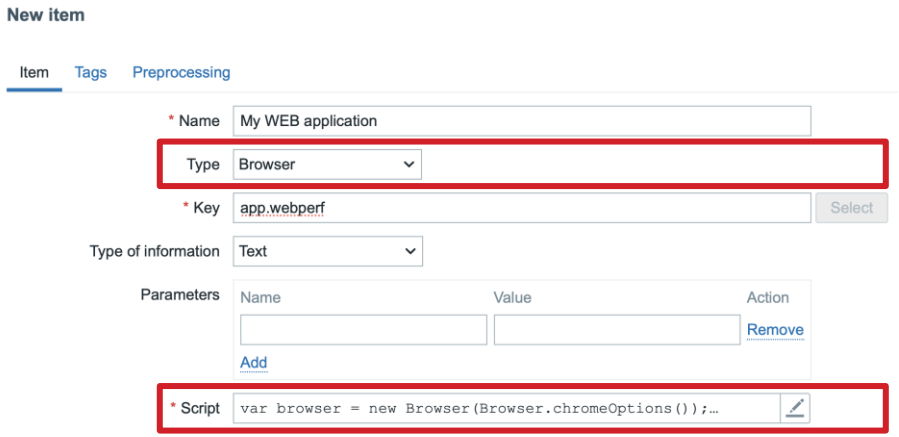
	Value
Primary application node: Linux: CPU user time	0.4958 %
Primary application node: Linux: CPU iowait time	0.09843 %
Primary application node: Linux: CPU system time	0.4745 %

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 %

End-user synthetic WEB monitoring





Monitoring user experience

End-user experience monitoring for WEB apps

Business scenario monitoring

Multi-step complex monitoring scenario with IF/THEN logic

Get a screenshot of each step

Monitoring of performance, availability and content

End-user synthetic WEB monitoring

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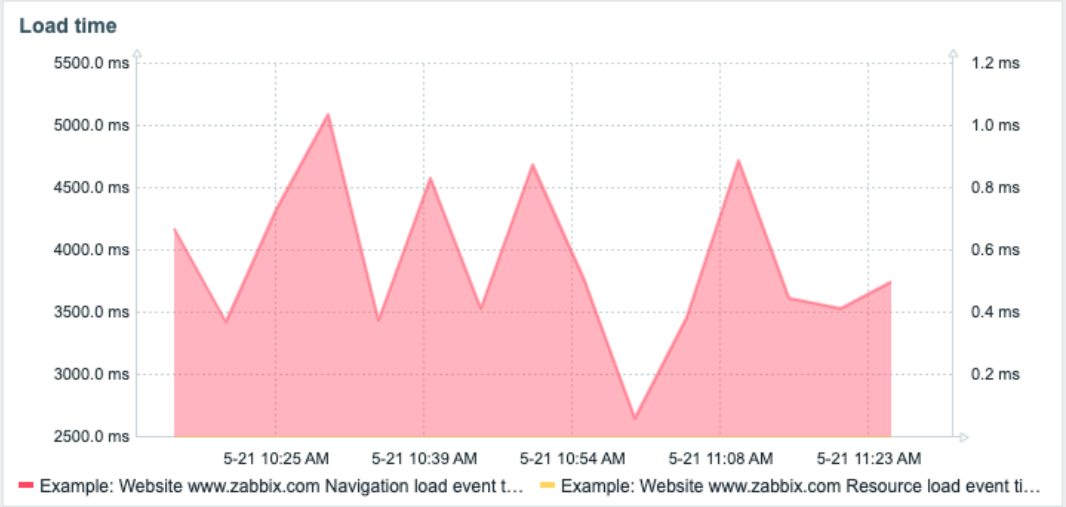
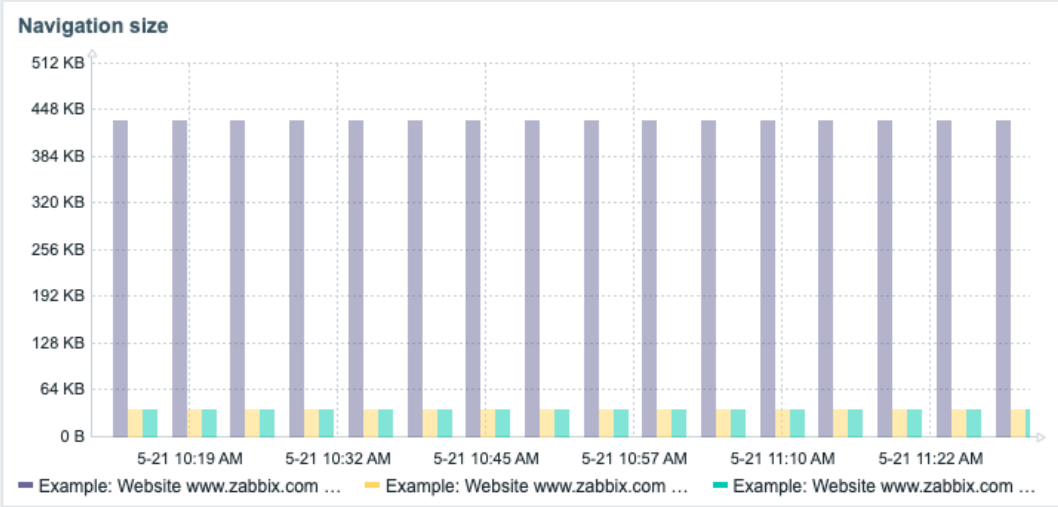
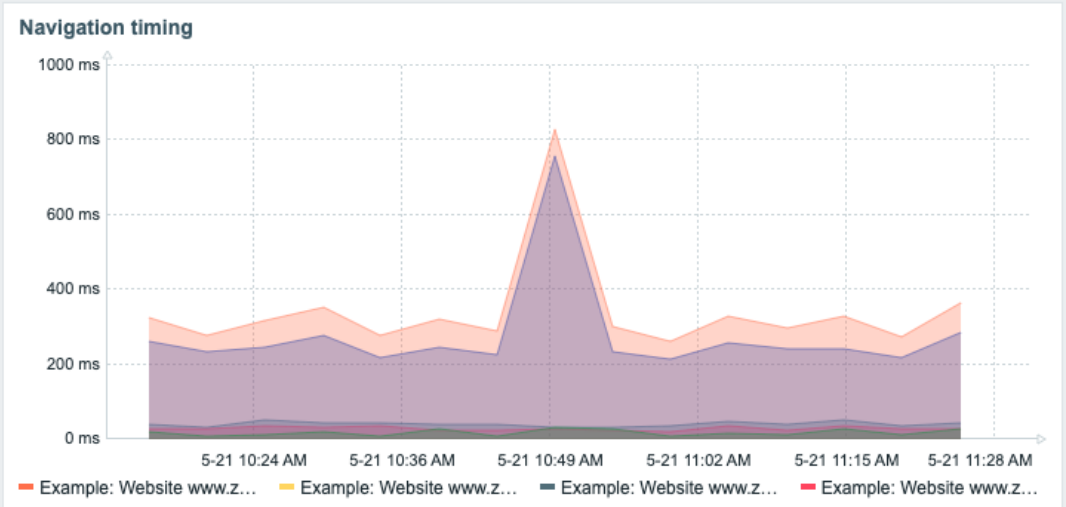
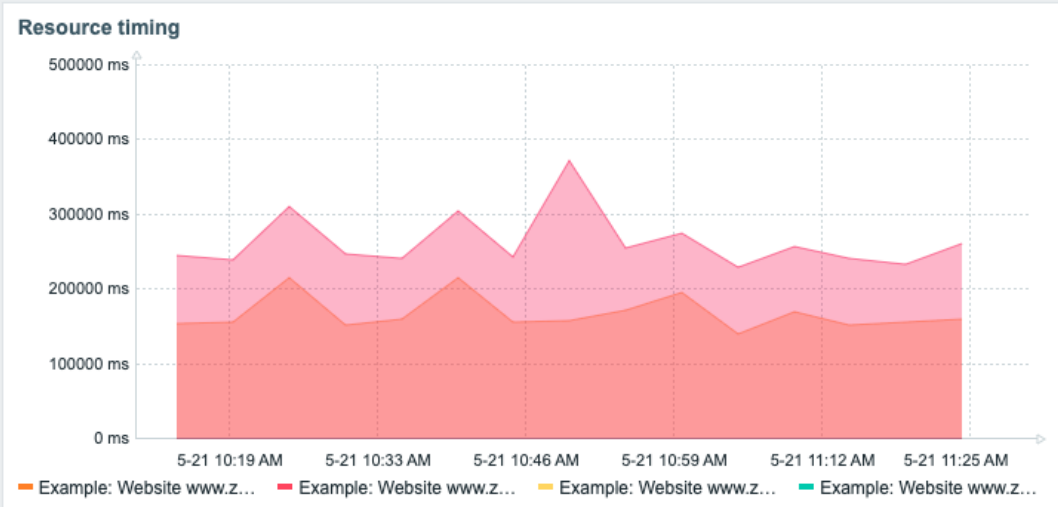
Timestamp	Screenshot
2024-05-21 11:45:05 AM	
2024-05-21 11:40:06 AM	
2024-05-21 11:35:05 AM	
2024-05-21 11:30:05 AM	
2024-05-21 11:25:05 AM	
2024-05-21 11:20:05 AM	
2024-05-21 11:15:04 AM	
2024-05-21 11:10:07 AM	
2024-05-21 11:05:04 AM	









A single pane of glass

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Dashboards

Scheduled PDF reporting

Business service monitoring (BSM)

User roles

Metric processing

Data processing

APM and tracing functionality

OpenTelemetry

Topology data

Processing of streaming data

Tracing, events, logs, binary

Visualization and reporting

Visualization of complex data: tracing, flows, etc

Widgets for advanced visualization

Massive usability improvements of Zabbix UI

Custom UI for any use case

Framework for widget development

Zabbix 7.0 LTS

Zabbix 8.0 LTS

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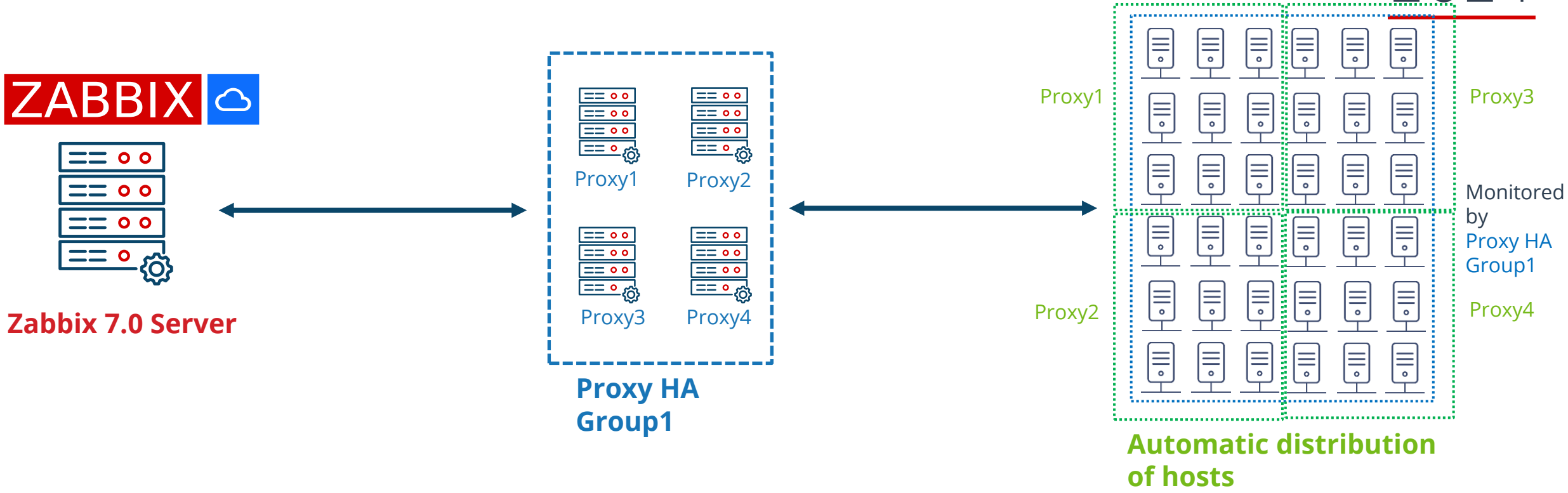
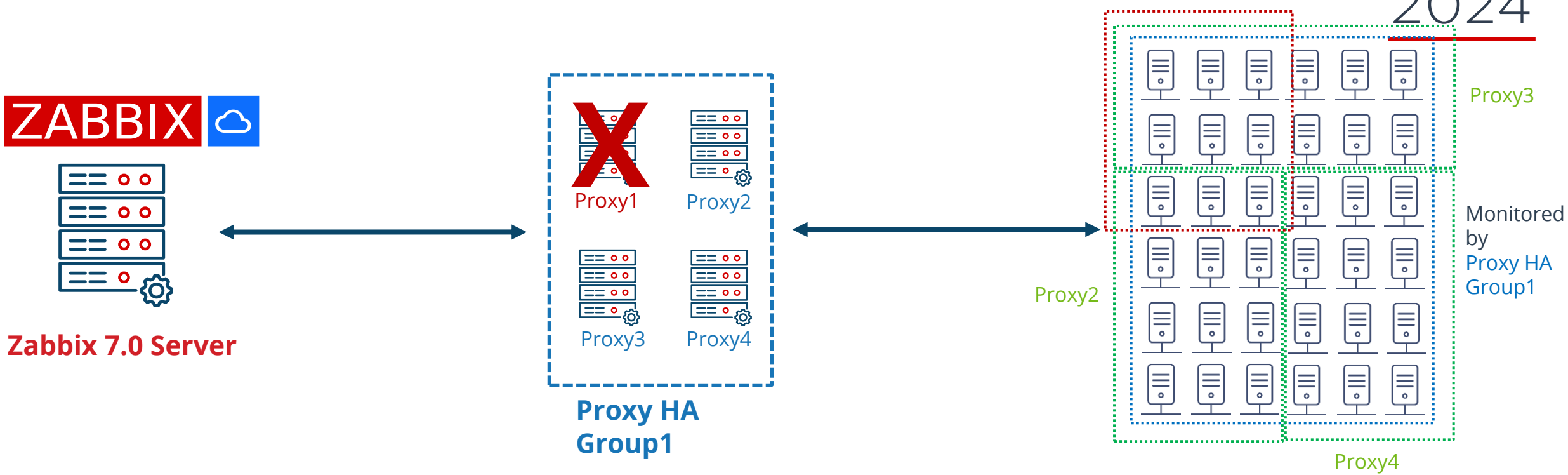
Proxy load balancing

The functionality we have been waiting for

Proxy load balancing and HA



Proxy load balancing and HA



High availability of proxies

Load balancing: automatic distribution of hosts accross a group of proxies

Auto-scaling of proxies in a K8S environment

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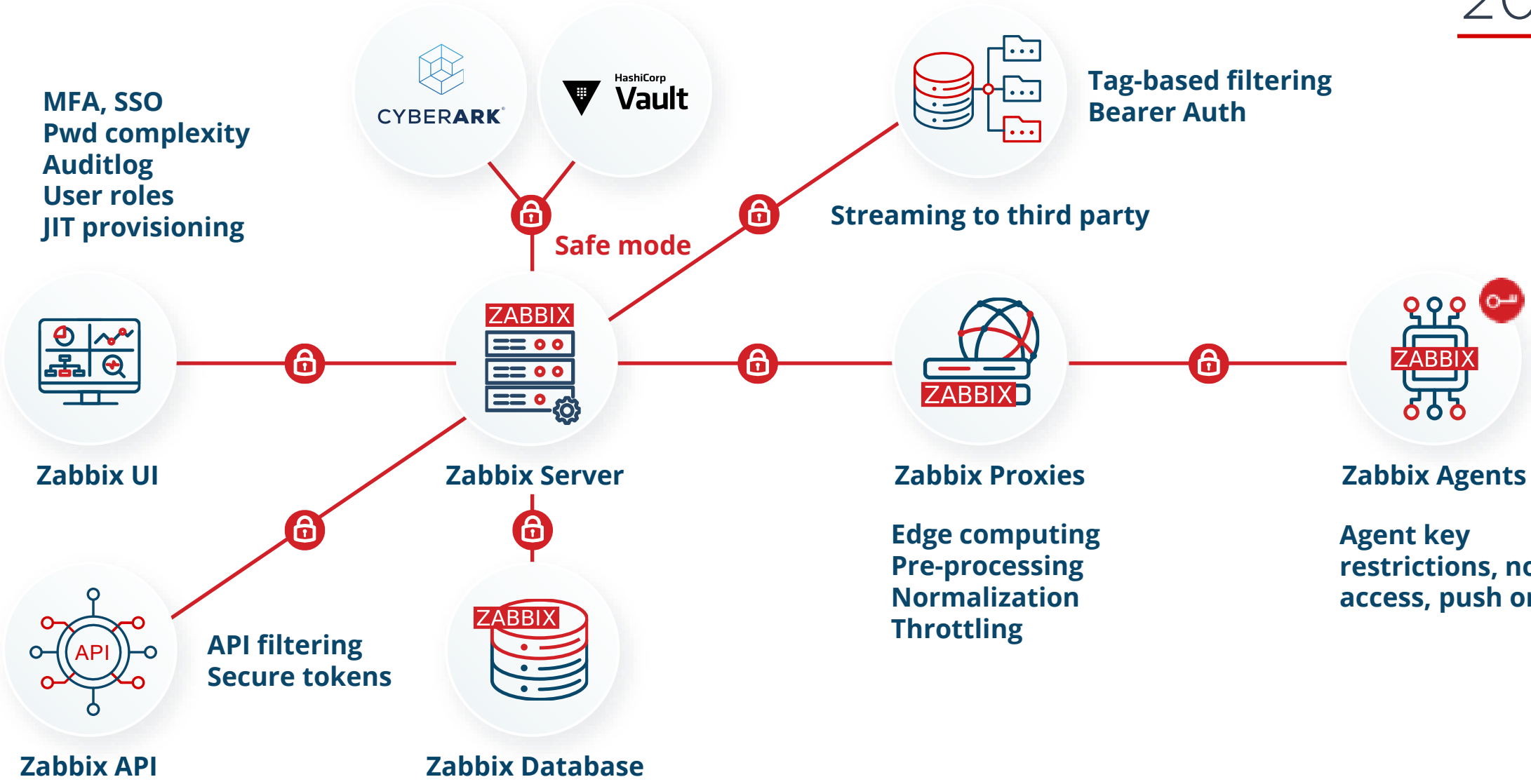
Quality and security

Our top priority

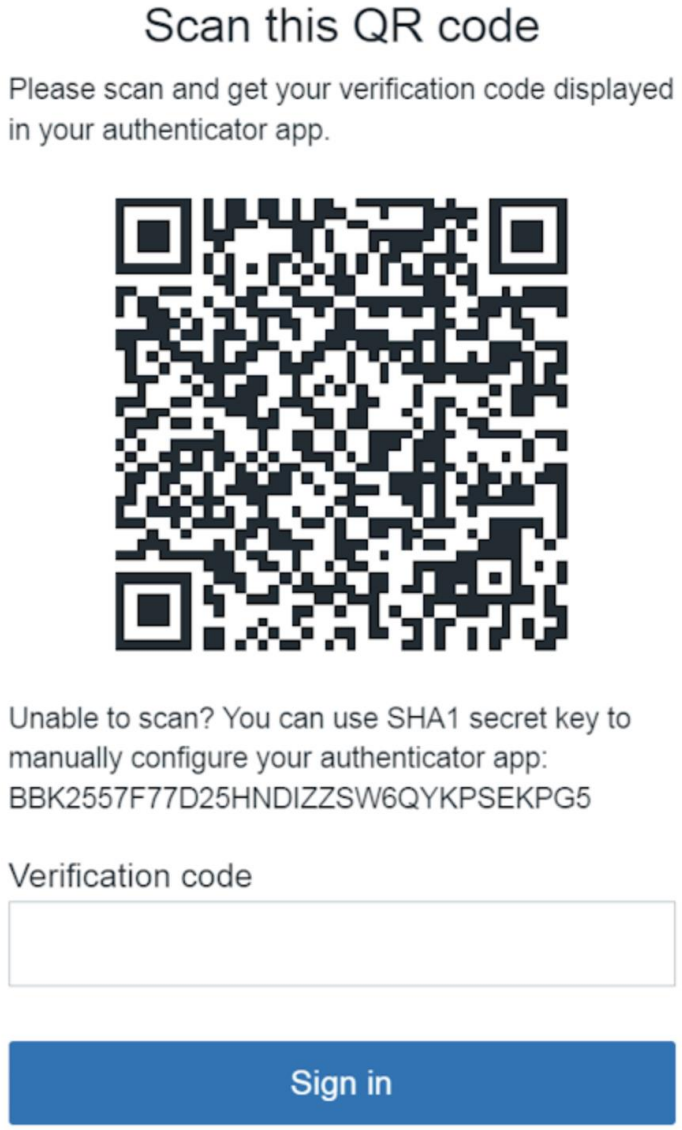
The highest security standards



Enterprise grade MFA

Time-Based One-Time Password authentication

Duo Universal Prompt authentication



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Scalability and performance

Lower TCO

Performance: transition to async & threads

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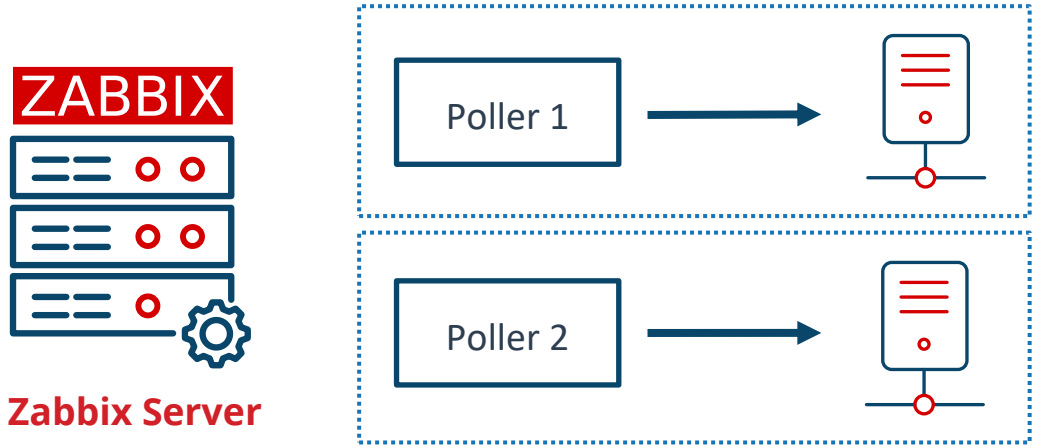
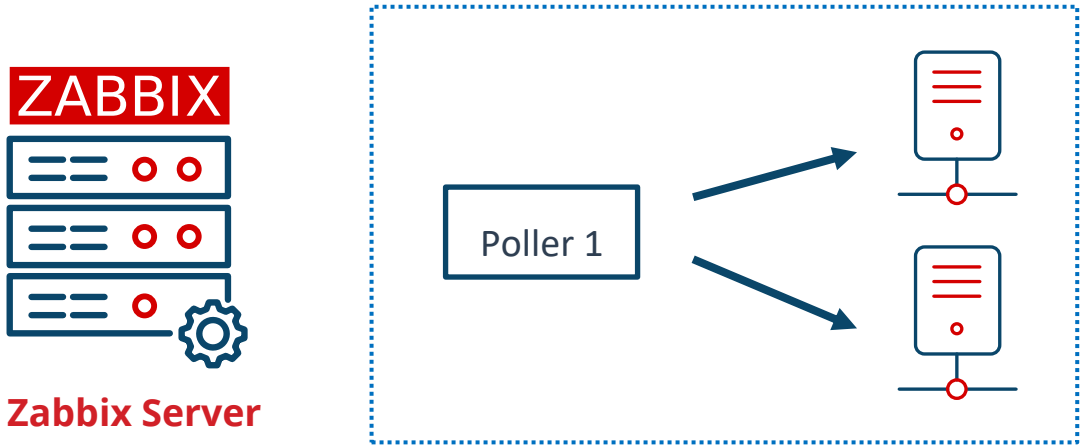
Before



Zabbix Server

One connection per poller

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

Performance: faster front-end for larger scale

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Before

Super admin ← 0.2s

User ← 2-3s (too much!)

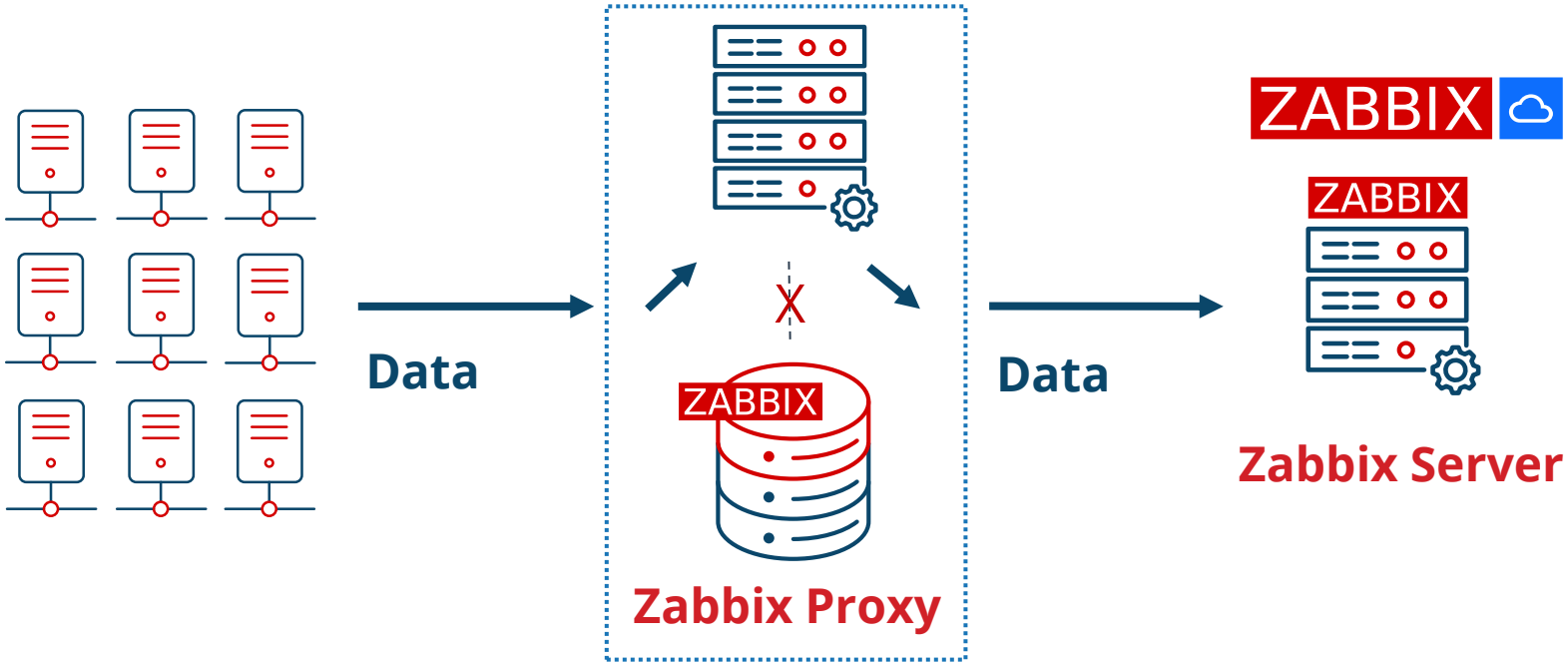
7.0 LTS

Super admin ← 0.2s

User ← 0.2-0.3s

10x faster Zabbix UI for non-superadmins

In-memory data collection mode for proxies



- Less IOPS
- Faster
- Cheaper
- Less energy

Various modes

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Disk mode

Memory mode

Hybrid mode

Centralized management of ITEM timeouts

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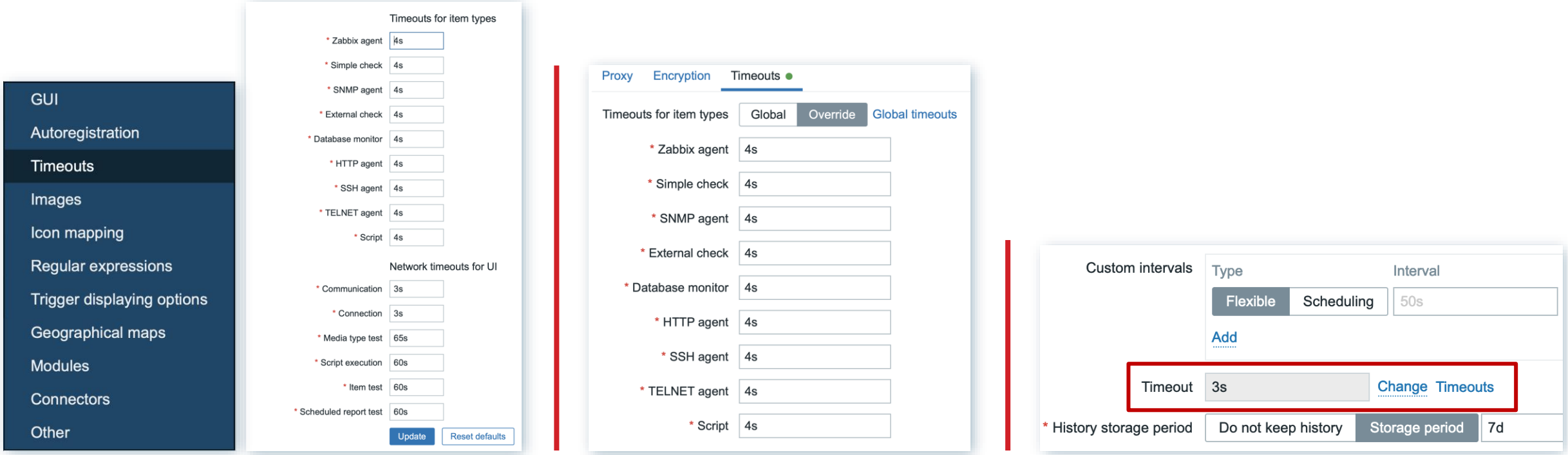


Global

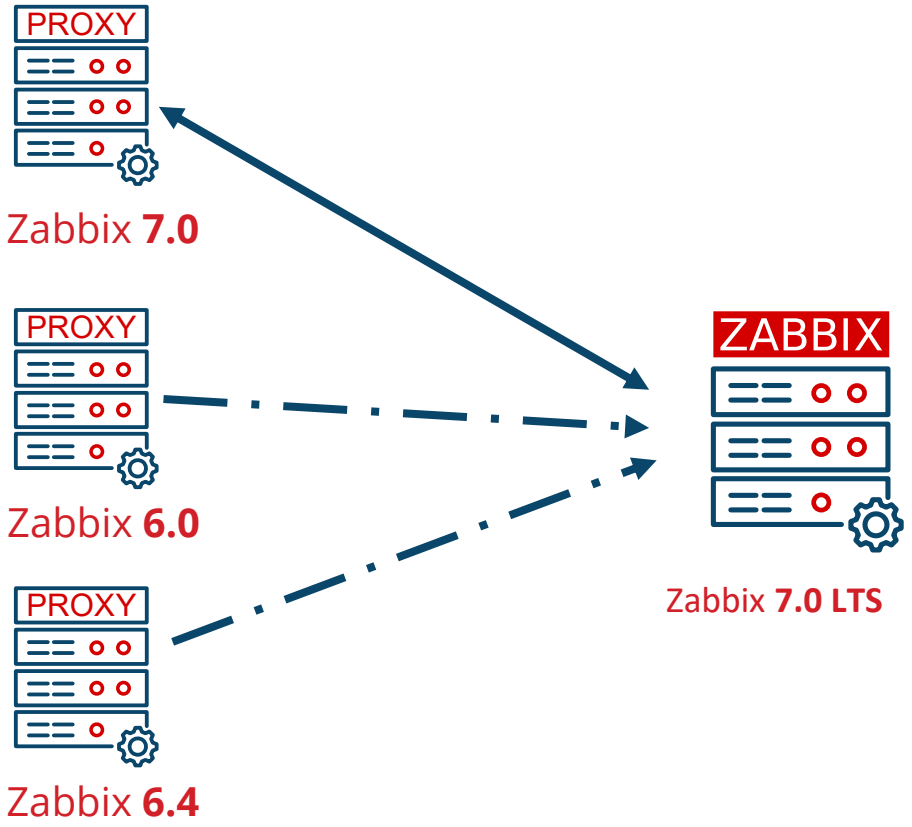
Proxy

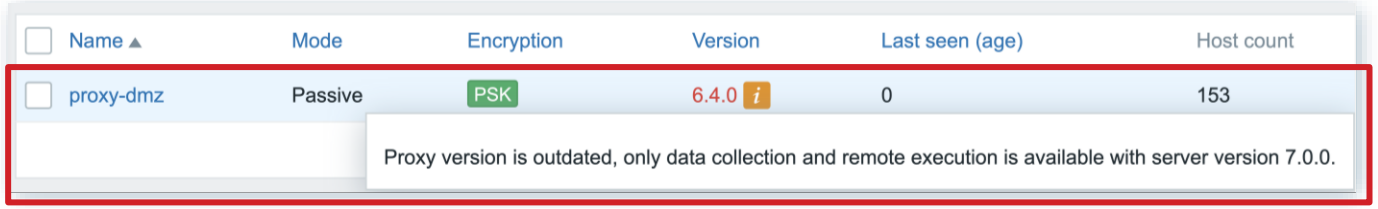
Item

Global, proxy, and item-level timeouts managed from Zabbix UI

More secure - no need to deal with *.conf

Zero-downtime upgrade of proxies





Zabbix 6.4:

Older proxies will continue to process data

Creates a longer time window for upgrade

You can observe versions of your proxies in UI

Pushing metrics to Zabbix

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Integrate your scripts and applications with Zabbix

Advanced DNS monitoring

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net.dns.get

net.dns.perf

DNS and DNSSEC

response time

availability

DNS record details


```
{
    "answer_section": [
        {
            "class": "IN",
            "name": "example.com.",
            "rdata": {
                "expire": 1209600,
                "mbox": "noc.dns.example.org.",
                "minttl": 3600,
                "ns": "ns.example.org.",
                "refresh": 7200,
                "retry": 3600,
                "serial": 2022091378
            },
            "rdlength": 44,
            "ttl": 1205,
            "type": "SOA"
        }
    ],
    "flags": [
        "RA"
    ],
    "query_time": "0.02",
```

Python library zabbix_utils

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pip install Zabbix_utils

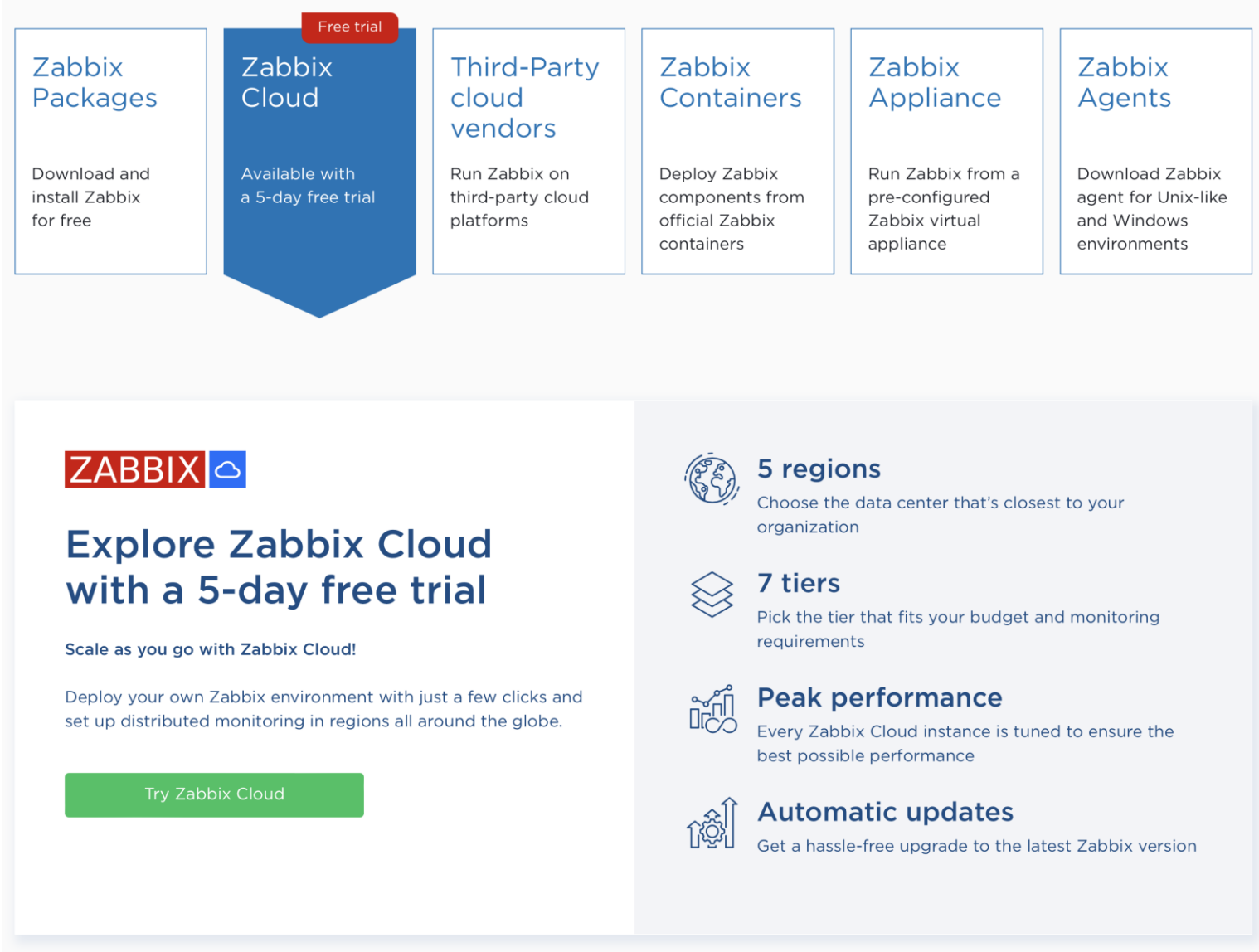
```python
# Use an authentication token generated via the web interface or
# API instead of standard authentication by username and password.
ZABBIX_AUTH = {
    "url": "127.0.0.1",
    "token": "8jF7sGh2Rp4TlQ1ZmXo0uYv3Bc6AiD9E"
}

# Create an instance of the ZabbixAPI class with the specified authentication details
api = ZabbixAPI(**ZABBIX_AUTH)

# Retrieve a list of users, including their user ID and name
users = api.user.get(
    output=['userid', 'name']
)

# Print the names of the retrieved users
for user in users:
    print(user['name'])
```

Install or Upgrade to Zabbix 7.0 LTS



zabbix.com/download

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Zabbix 7.2

Evolution, not revolution

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7.2 (In Progress)

ZBXNEXT-7689 Top items widget

ZBXNEXT-9199 Top hosts improvements

ZBXNEXT-599 Logarithmic Y axis for graphs

ZBXNEXT-2122 Users can manage own medias

ZBXNEXT-9319 Dashboard WYSIWYG

ZBXNEXT-9208 New macro and web scenario functions

ZBXNEXT-8784, 8785, 9420 Network map improvements

Oracle removed 🧐

7.2 (R&D)

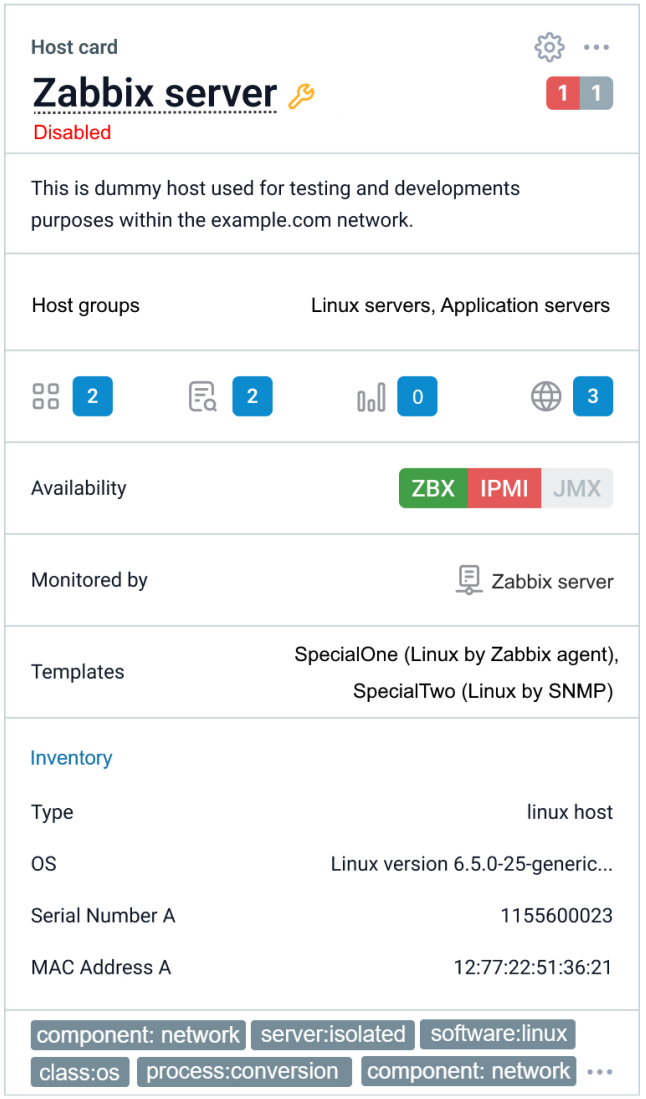
Event correlation

Runtime context cache

OAuth 2.0 for SMTP

JS macro API

GPU monitoring



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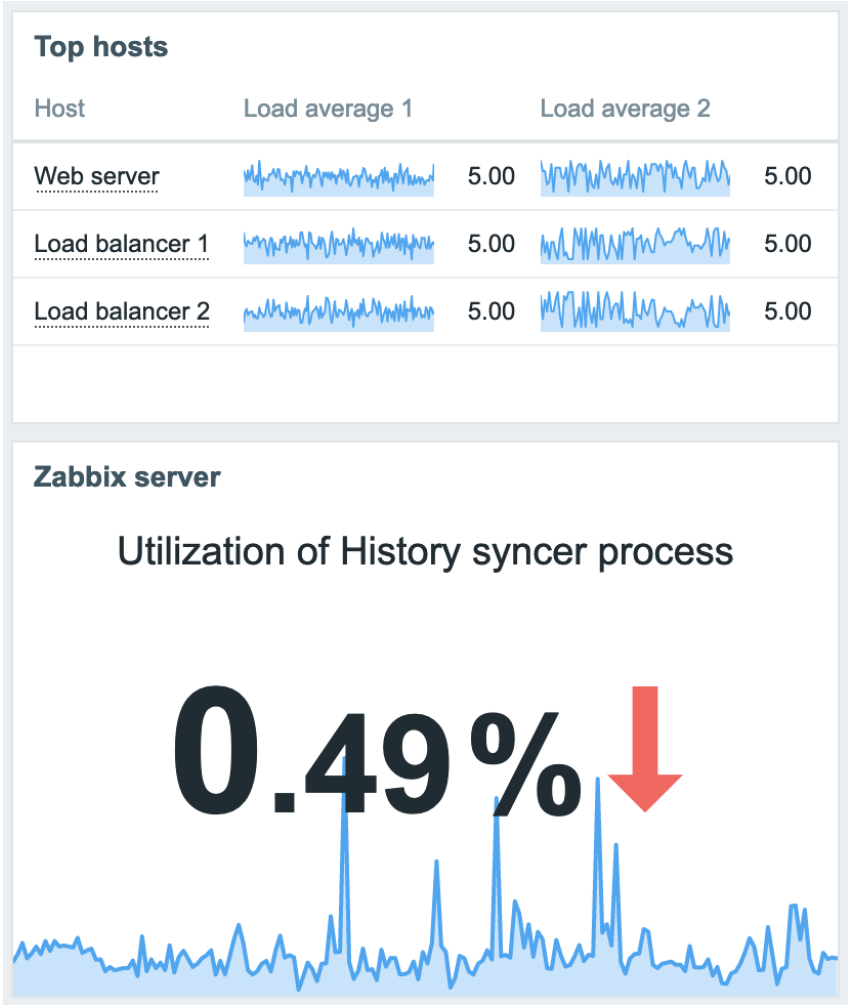
7.2

Prepare codebase for bigger changes

Normalize release schedule after 7.0

Release date: End of 2024



ZABBIX SUMMIT 2024

THANK YOU AND ENJOY ZABBIX ☺

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