

The ZABBIX logo consists of the word "ZABBIX" in a bold, white, sans-serif font, centered within a solid red rectangular background. The background of the entire slide is a dark blue gradient with a faint, glowing network of white lines and dots, and a subtle world map silhouette in the background.

**ZABBIX**

# Zabbix 7.0 and beyond

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**Alexei Vladishev**  
**Founder, CEO**



Aerospace



Education



Banking



Retail



Chemicals



Government



Healthcare



Finance



Telcos



IT



Marketing



Transaction processing/payments

Is my business up and running?

Including the **space**



**esa**

European Space Agency

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

Our vision

**ZABBIX**

A universal free  
and open-source enterprise-level  
monitoring solution

**ZABBIX '24**  
CONFERENCE  
BENELUX

## A single pane of glass

IT & OT

The ultimate monitoring and observability solution

Extremely adaptable to all possible use cases

Lowest TCO

Superb visualization and reporting

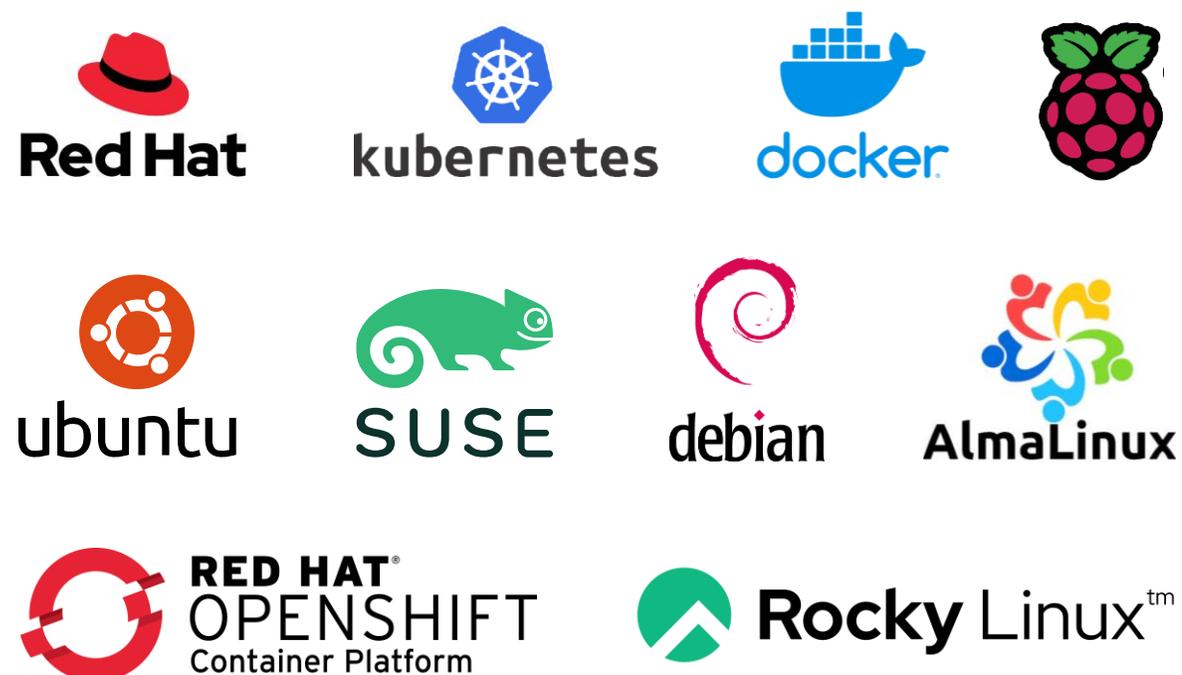
Highly scalable (downscaling and upscaling)

Quality and security is top priority

# Staying open-source

An inclusive solution

## ON-PREMISE



## IN THE CLOUD



# Sustainability

Long-term thinking



# 24x7 professional services for end-users and MSPS



# Steady growth



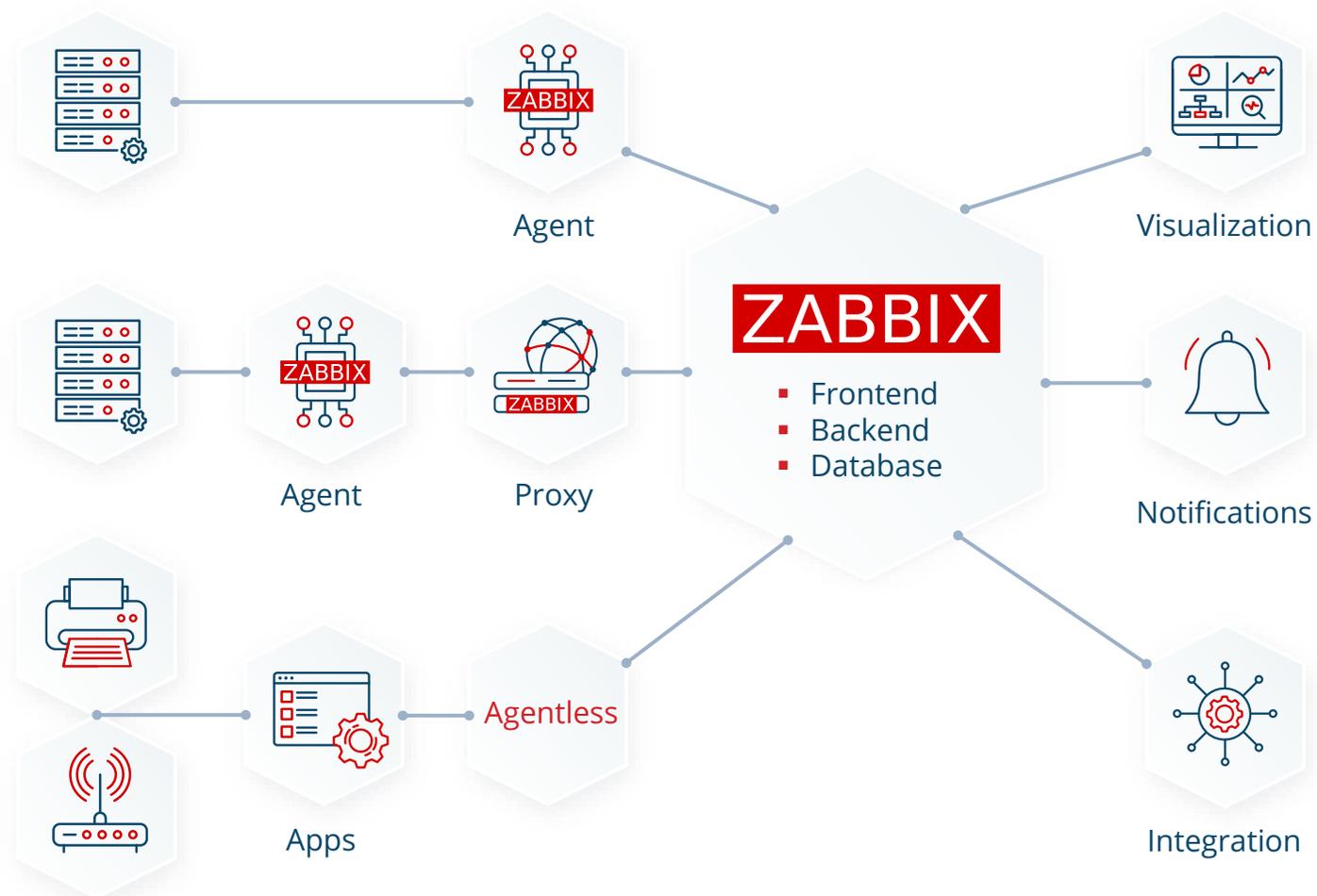
150+  
Zabbix **team** members

250+  
**partners** around the world

# An all-in-one platform

One product to cover it all

# Collect → Analyze → React and Visualize



High-quality data, also for **AIOps**

Proxies for **DM and Edge computing**

API for automation and integrations

Auto-remediation

**Anomaly detection**

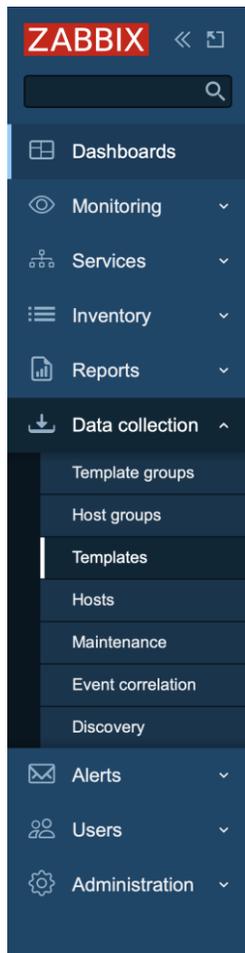
# All levels: from infrastructure to business

**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**

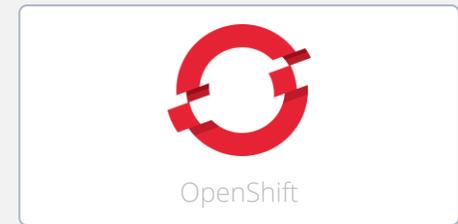
.NET	IC.Предприятие	Active Directory	ActiveMQ	Alcatel Lucent	Cloudstack	ClusterControl	Confluence	Cooling	CoreOS	HTTP	HTTPS	Huawei
Alerta	Android	Ansible	Antivirus	Apache	Couchbase	cPanel	D-Link	Database monitoring	Datacom	IBM AIX	IBM AS/400	IBM MQ
APC	Appdynamics	Application monitoring	Arduino	Arista	DB2	Debian	Dell	DNS	Docker	Ingress	Intel	InterSystems
Aruba	Asterisk	Avaya	AWS	AWS CloudWatch	Drupal	Elasticsearch	Eltex	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	Galera cluster	Geckoboard	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	Confluence	Cooling	CoreOS	High Availability	Hipchat	Hitachi HDS, HNAS	HP Enterprise	HP-UX	Mattermost	Mellanox	Memcached

[zabbix.com/integrations](https://zabbix.com/integrations)

# Out-of-the-box monitoring and integrations



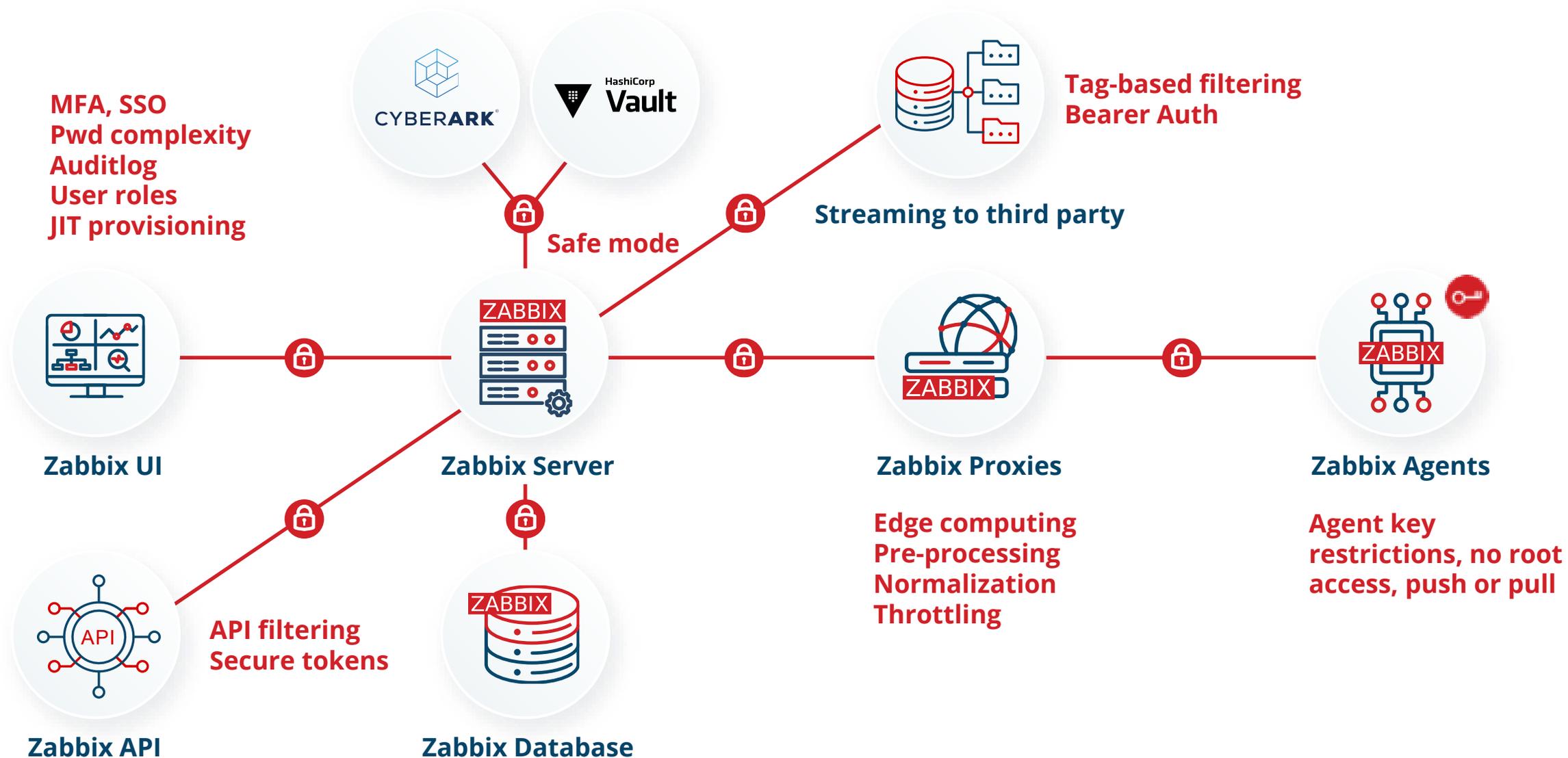
Also cost explorer templates for Cloud providers!



# Quality and security

Our top priority

# The highest security standards





# Verified by independent researchers



Bounties paid in 2023: ~\$20K

Zabbix ID	CVE number	CVSS score	Zabbix severity	Synopsis
ZBV-2023-07-27-9	CVE-2023-29458	5.9	Medium	Duktape 2.6 bug crashes JavaScript putting too many values in valstack.
ZBV-2023-07-27-8	CVE-2023-29457	6.3	Medium	Insufficient validation of Action form input fields
ZBV-2023-07-27-7	CVE-2023-29456	5.7	Medium	Inefficient URL schema validation
ZBV-2023-07-27-6	CVE-2023-29455	5.4	Medium	Reflected XSS in several fields of graph form
ZBV-2023-07-27-5	CVE-2023-29454	5.4	Medium	Persistent XSS in the user form

Security advisories and CVE database

# A single pane of glass

Total visibility and transparency

# Visualization and reporting



## 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

## Core widgets

Pie & donut charts

Gauge charts

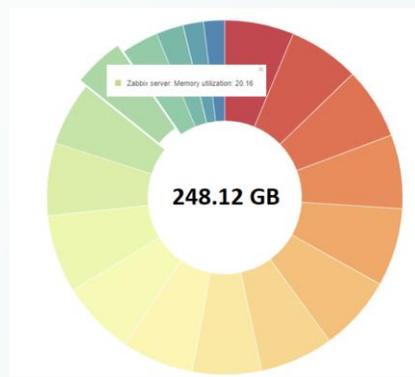
Item history



## 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

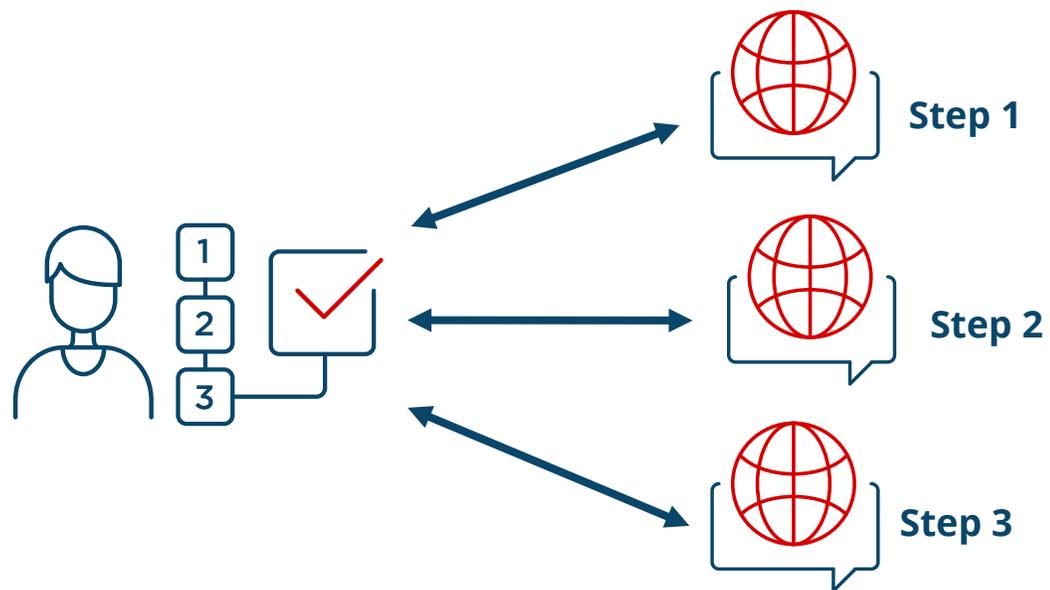
Honeycombs

Service trees

Topology



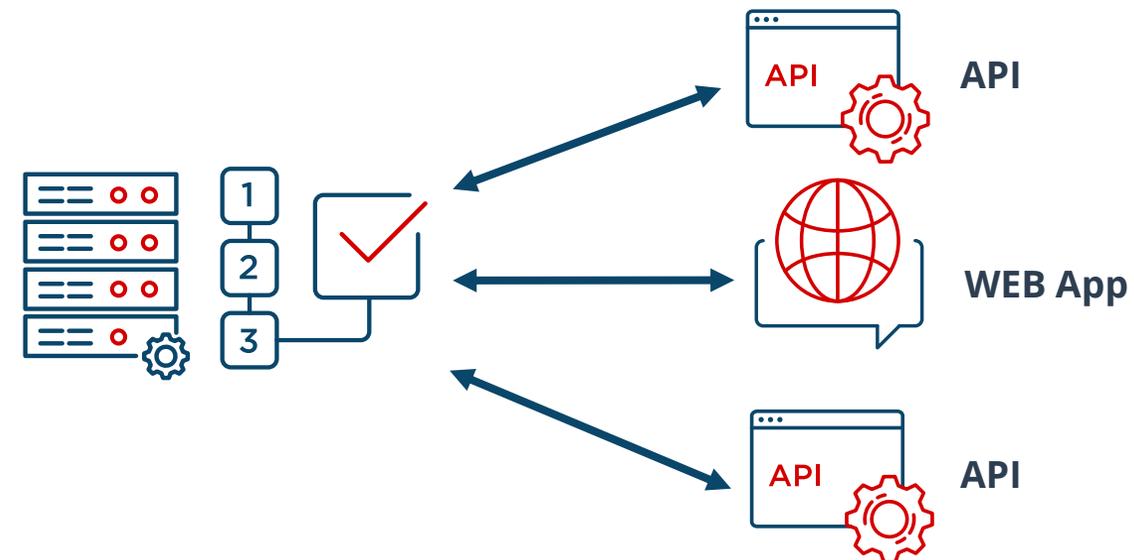
# Synthetic monitoring



## Monitoring user experience

End-user experience monitoring for WEB apps

Business scenario monitoring



## Executing multi-step checks

Complex interaction with Cloud APIs over HTTPS

Advanced availability checks

Business scenario monitoring

# A single pane of glass

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

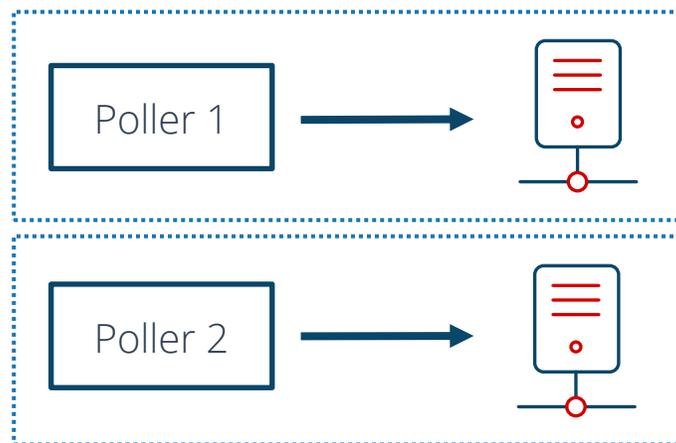
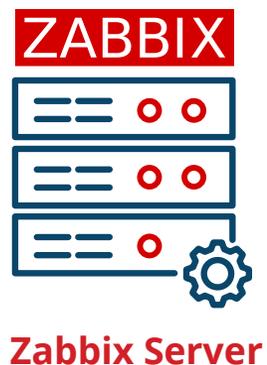
Zabbix 8.0 LTS

# Reducing operating costs

It's not only about performance!

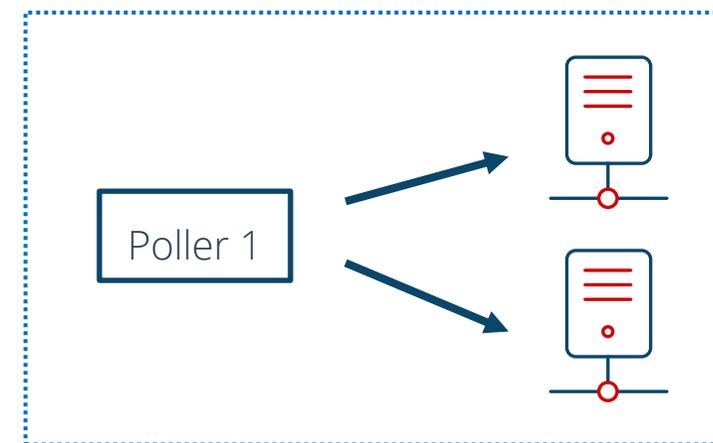
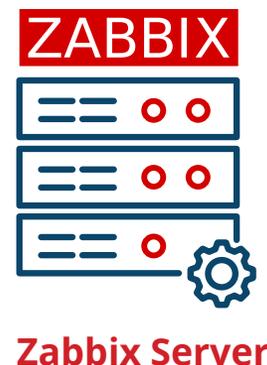
# Performance: transition to async and threads

Now



One connection per poller

7.0 LTS



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



Now

7.0 LTS



Super admin

← 0.2s



User

← 2-3s  
(too much!)



Super admin

→ 0.2s

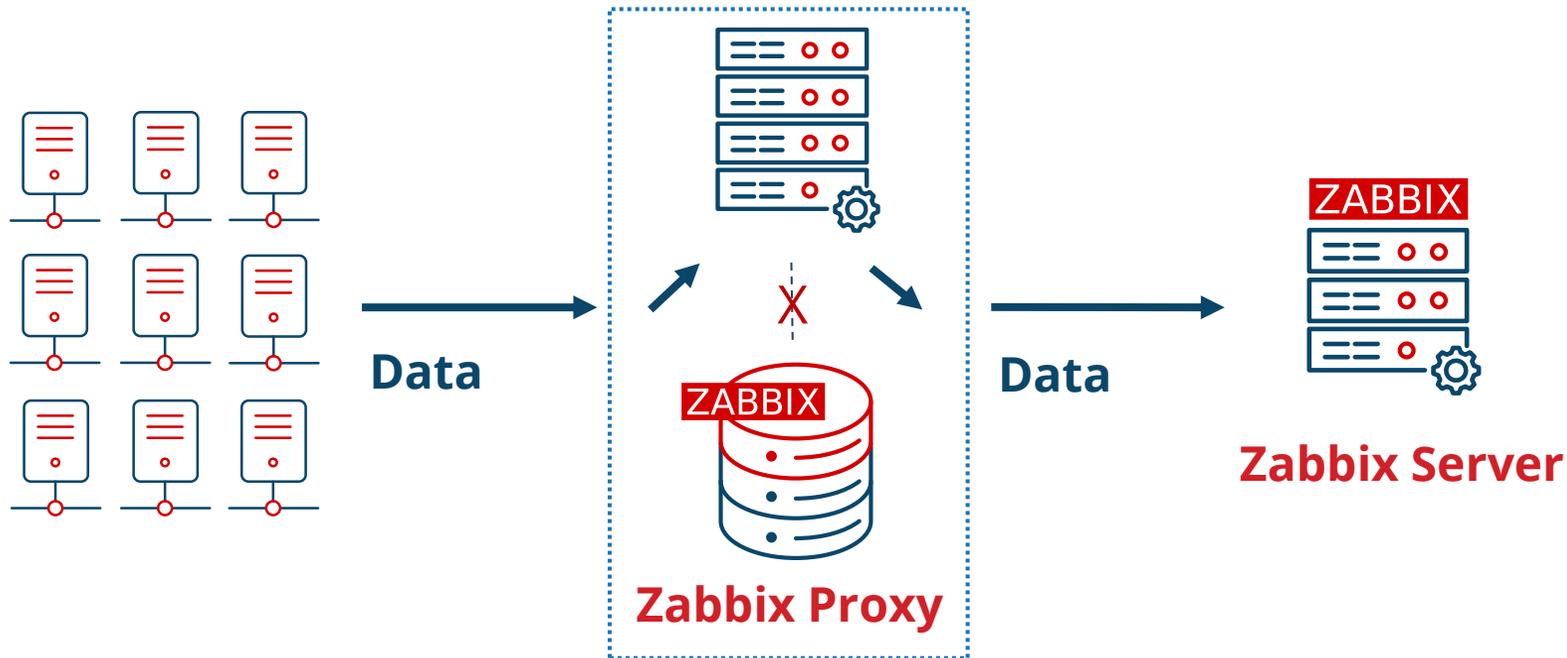


User

→ 0.2-0.3s

10x faster permission checks for non-superadmins

# In-memory data collection mode for proxies



Less IOPS  
Faster  
Cheaper  
Less energy

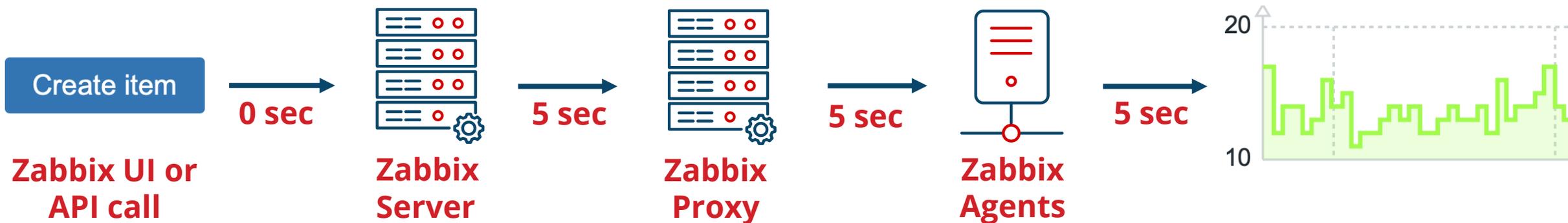


# Instant configuration update

Incremental updates of configuration changes

New items are now checked **within a minute** after creation

Extreme responsiveness!



# Centralized management of ITEM timeouts

- GUI
- Autoregistration
- Timeouts**
- Images
- Icon mapping
- Regular expressions
- Trigger displaying options
- Geographical maps
- Modules
- Connectors
- Other

Timeouts for item types

- \* Zabbix agent 4s
- \* Simple check 4s
- \* SNMP agent 4s
- \* External check 4s
- \* Database monitor 4s
- \* HTTP agent 4s
- \* SSH agent 4s
- \* TELNET agent 4s
- \* Script 4s

Network timeouts for UI

- \* Communication 3s
- \* Connection 3s
- \* Media type test 65s
- \* Script execution 60s
- \* Item test 60s
- \* Scheduled report test 60s

[Update](#) [Reset defaults](#)

Proxy Encryption Timeouts

Timeouts for item types **Global** Override Global timeouts

- \* Zabbix agent 4s
- \* Simple check 4s
- \* SNMP agent 4s
- \* External check 4s
- \* Database monitor 4s
- \* HTTP agent 4s
- \* SSH agent 4s
- \* TELNET agent 4s
- \* Script 4s

Custom intervals

Type	Interval
<b>Flexible</b> Scheduling	50s
<a href="#">Add</a>	
<b>Timeout</b> 3s	<a href="#">Change Timeouts</a>
* History storage period	Do not keep history Storage period 7d

Global

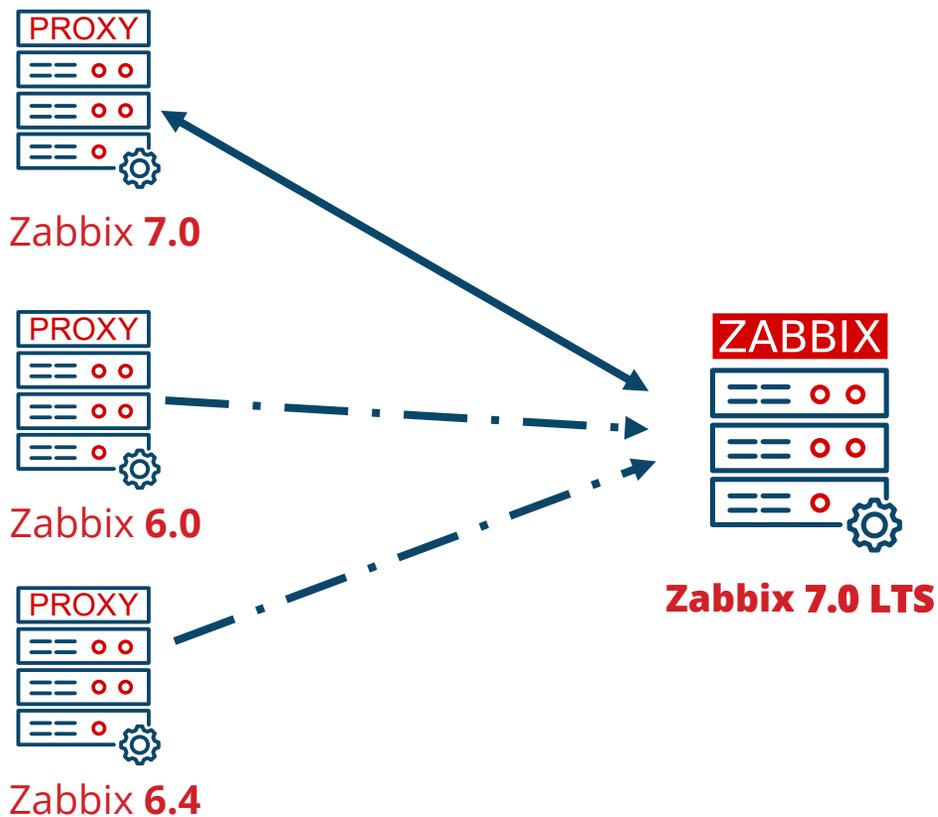
Proxy

Item

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

More secure - no need to deal with \*.conf

# Zero-downtime upgrade of proxies



<input type="checkbox"/>	Name ▲	Mode	Encryption	Version	Last seen (age)	Host count
<input type="checkbox"/>	proxy-dmz	Passive	PSK	6.4.0 <i>i</i>	0	153

Proxy version is outdated, only data collection and remote execution is available with server version 7.0.0.

## Zabbix 6.4:

Older proxies will **continue to process data**

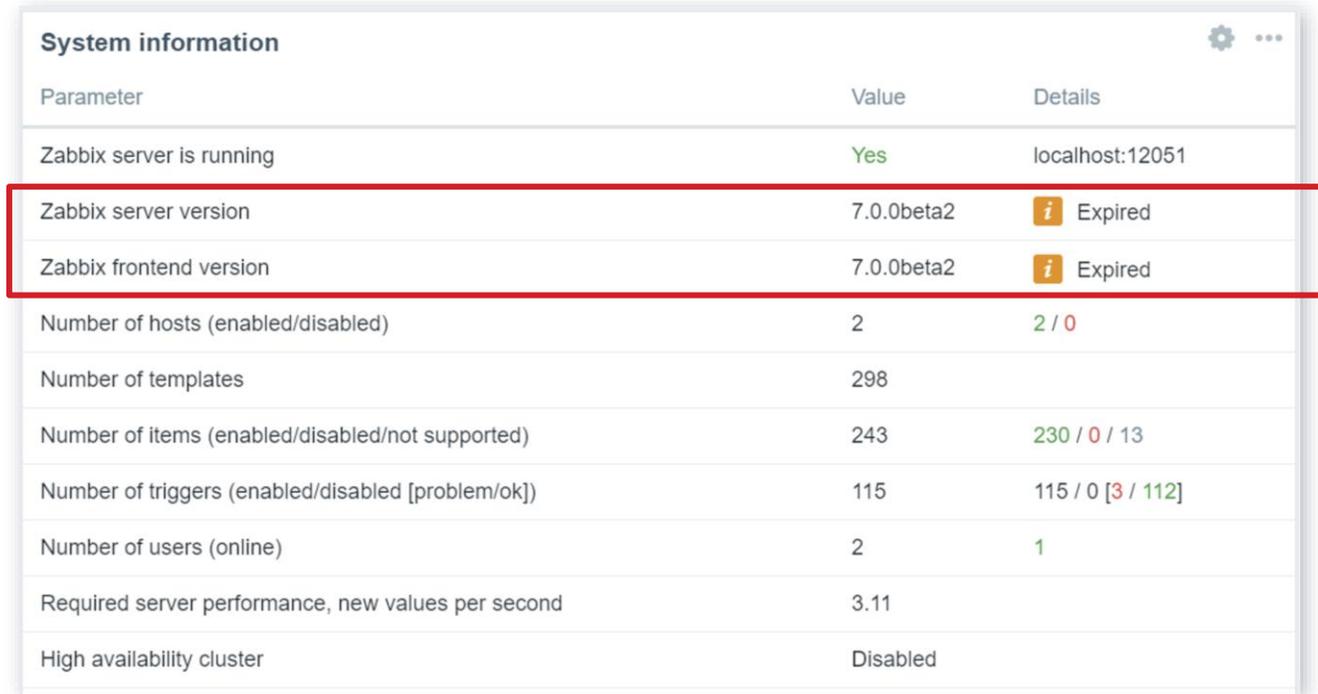
Creates a longer **time window** for upgrade

You can observe versions of your proxies in UI

# Informing users about available upgrades

Support state

Available upgrades



The screenshot shows the 'System information' page in Zabbix. A red box highlights the 'Zabbix server version' and 'Zabbix frontend version' rows, both of which are marked as 'Expired' with an information icon. The table also displays other system metrics such as the number of hosts, templates, items, triggers, and users.

Parameter	Value	Details
Zabbix server is running	Yes	localhost:12051
Zabbix server version	7.0.0beta2	 Expired
Zabbix frontend version	7.0.0beta2	 Expired
Number of hosts (enabled/disabled)	2	2 / 0
Number of templates	298	
Number of items (enabled/disabled/not supported)	243	230 / 0 / 13
Number of triggers (enabled/disabled [problem/ok])	115	115 / 0 [3 / 112]
Number of users (online)	2	1
Required server performance, new values per second	3.11	
High availability cluster	Disabled	

# Reducing operating costs

Network discovery

Auto-registration

Low-level discovery (LLD)

JIT user provisioning

and much more!

## Reduce maintenance costs

Zero-downtime upgrade of proxies

Template versioning

Automatic up/down-scaling

## Centralized management and SSO

A gentle learning curve, better UI/UX

## Performance

Transition to threads

Perfect vertical and horizontal scalability

## A more efficient history storage engine

Lower HW (CPU, memory, storage) requirements

Zabbix 7.0 LTS

Zabbix 8.0 LTS

# Real-time data streaming and ingestion

Connectors and webhooks for real-time streaming and ingestion of metrics and events



Zabbix Server

Streaming of metrics and events



Ingestion of metrics



Zabbix Server

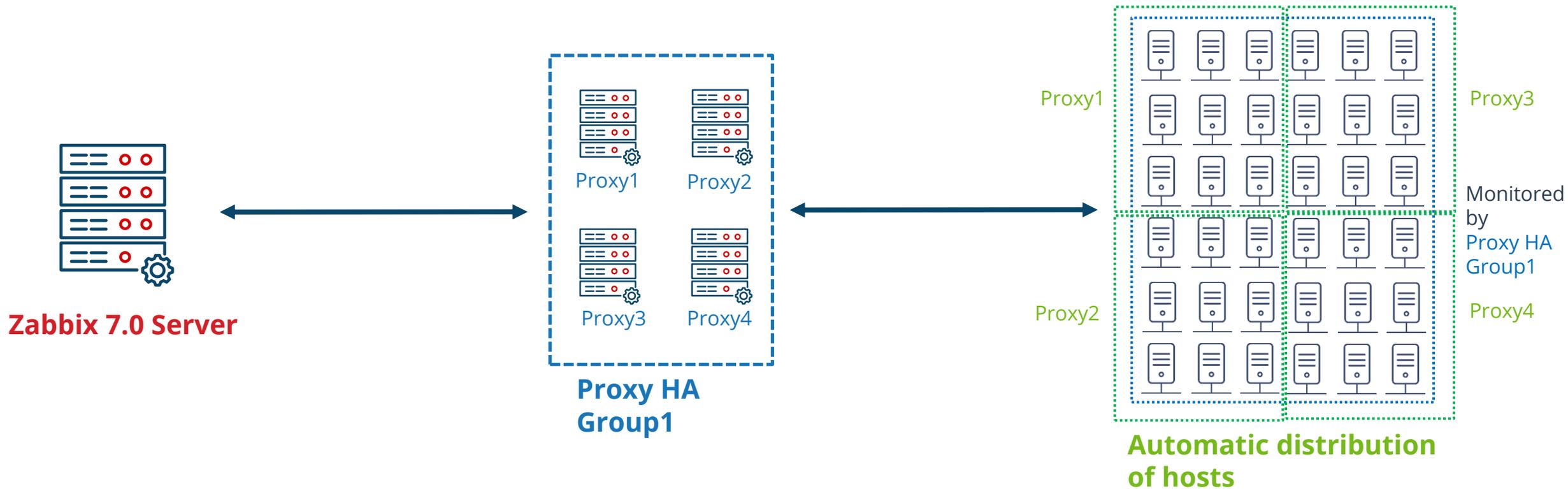


# Pushing metrics to Zabbix

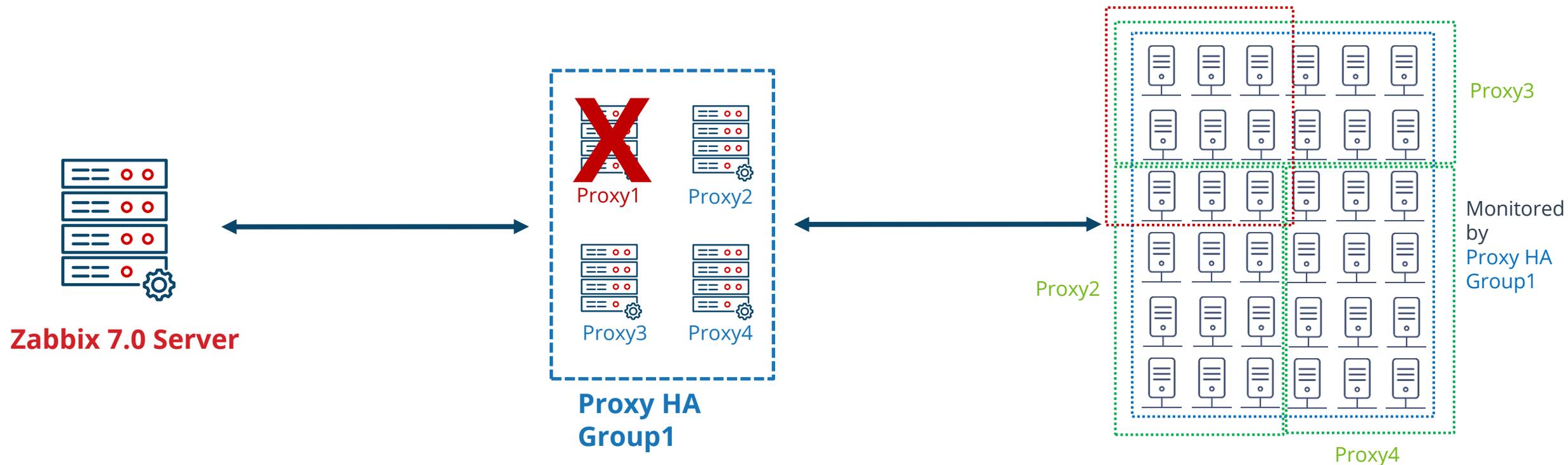
Integrate your scripts and application with Zabbix



# Proxy load balancing and HA



# Proxy load balancing and HA



High availability of proxies

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

Auto-scaling of proxies in a K8S environment

# Other notable enhancements

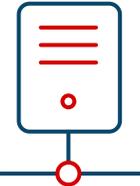
- [ZBXNEXT-8702] Host groups created by LLD can be shared
- [ZBXNEXT-8721, 5401, 3826] Advanced DNS monitoring, net.dns.get/net.dns.perf
- [ZBXNEXT-5120] Support of macro functions for all user & built-in macros
- [ZBXNEXT-8735] Filtering by value type and configurable retries for connectors
- [ZBXNEXT-5380] New action “Add/remove host tag” for discovery and auto-reg actions
- [ZBXNEXT-8121] Support of user input for manual scripts
- [ZBXNEXT-8760] Configurable media types for users provisioned by JIT

Check **Release Notes** for much more new features!

# Extremely adaptable

Solution for any use case

# More ways to adapt and extend



Agent plugins, scripts

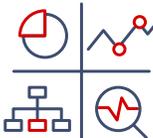
\* Name

Protocol

Data type

\* URL

Streaming data and events



Process any data types: events, tracing, logs, binary

- GUI
- Autoregistration
- Timeouts
- Images
- Icon mapping
- Regular expressions
- Trigger displaying options
- Geographical maps
- Modules
- Connectors
- Other

UI modules

Scope

Type

Scripts, manual and automatic actions



Custom UI

\* Name

Protocol

Data type

Data ingestion

1:

2:

3:

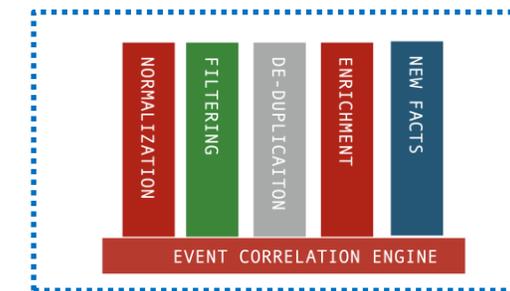
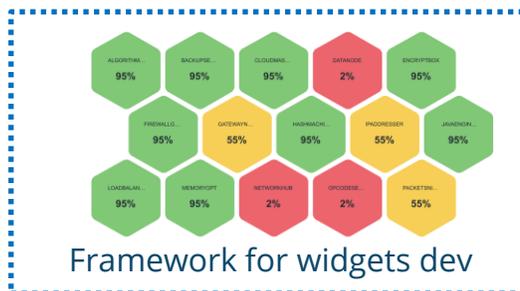
Pre-processing

Media type  Options

\* Name

Type

Webhooks



## 7.0 LTS

Dynamic dashboards

Data ingestion

Next-generation  
visualization

Synthetic monitoring

Proxy load balancing

## 7.x

Event correlation engine

Advanced event correlation

OpenTelemetry and tracing

Custom inventory

Custom UI

## 8.0 LTS

Ultimate observability platform

APM and compliance monitoring

Event and Log management

Use of AI and ML for advanced  
anomaly detection and  
operations

Management functions

**ZABBIX**

THANK YOU!

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