

ZABBIX 2023 Conference

LATIN AMERICA



Getting closer to Zabbix 7.0 LTS

250 attendees

79 companies

89 different cities

10 countries

Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Perú,
Paraguay, Uruguay



Aerospace



Education



Banking



Retail



Chemicals



Government



Healthcare



Finance



Telcos



IT



Marketing



Transaction processing, payments

Does my business work?

We're everywhere



Including the **space**



esa

European Space Agency

Zabbix is a **Universal** Open Source
enterprise-level monitoring solution

Top benefits of using enterprise open source

1

Better security

32%

2

Higher quality
software

32%

3

Ability to safely
leverage open
source tech

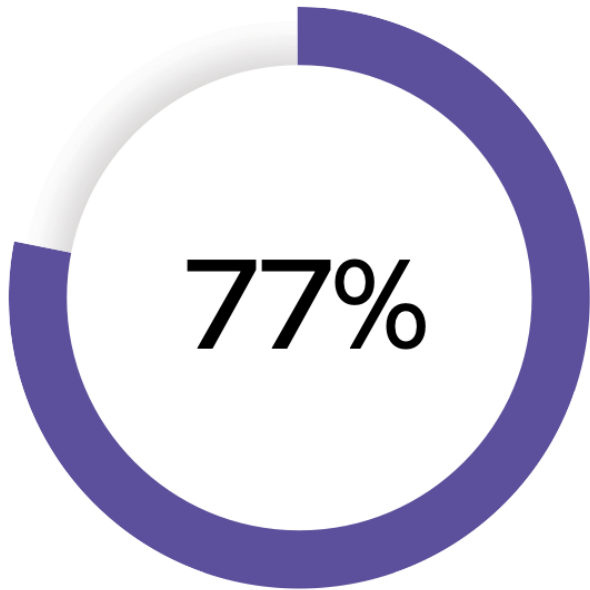
28%



The State of the Enterprise Open Source Report, 2022.

<https://www.redhat.com/en/resources/state-of-enterprise-open-source-report-2022>





of IT leaders have a more positive perception of enterprise open source than they did a year ago.

(APAC = 75%, EMEA = 79%, LATAM = 77%, U.S. = 77%)

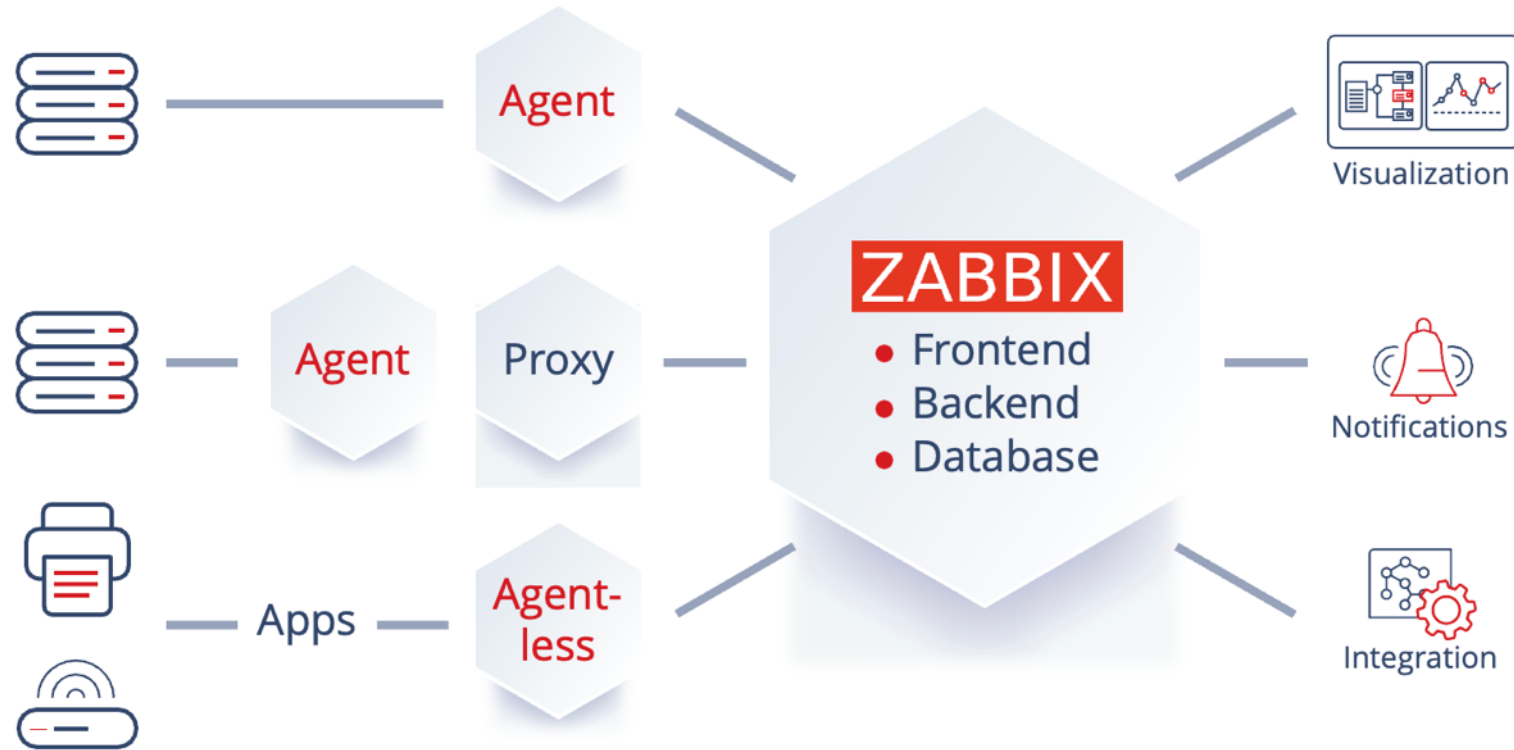


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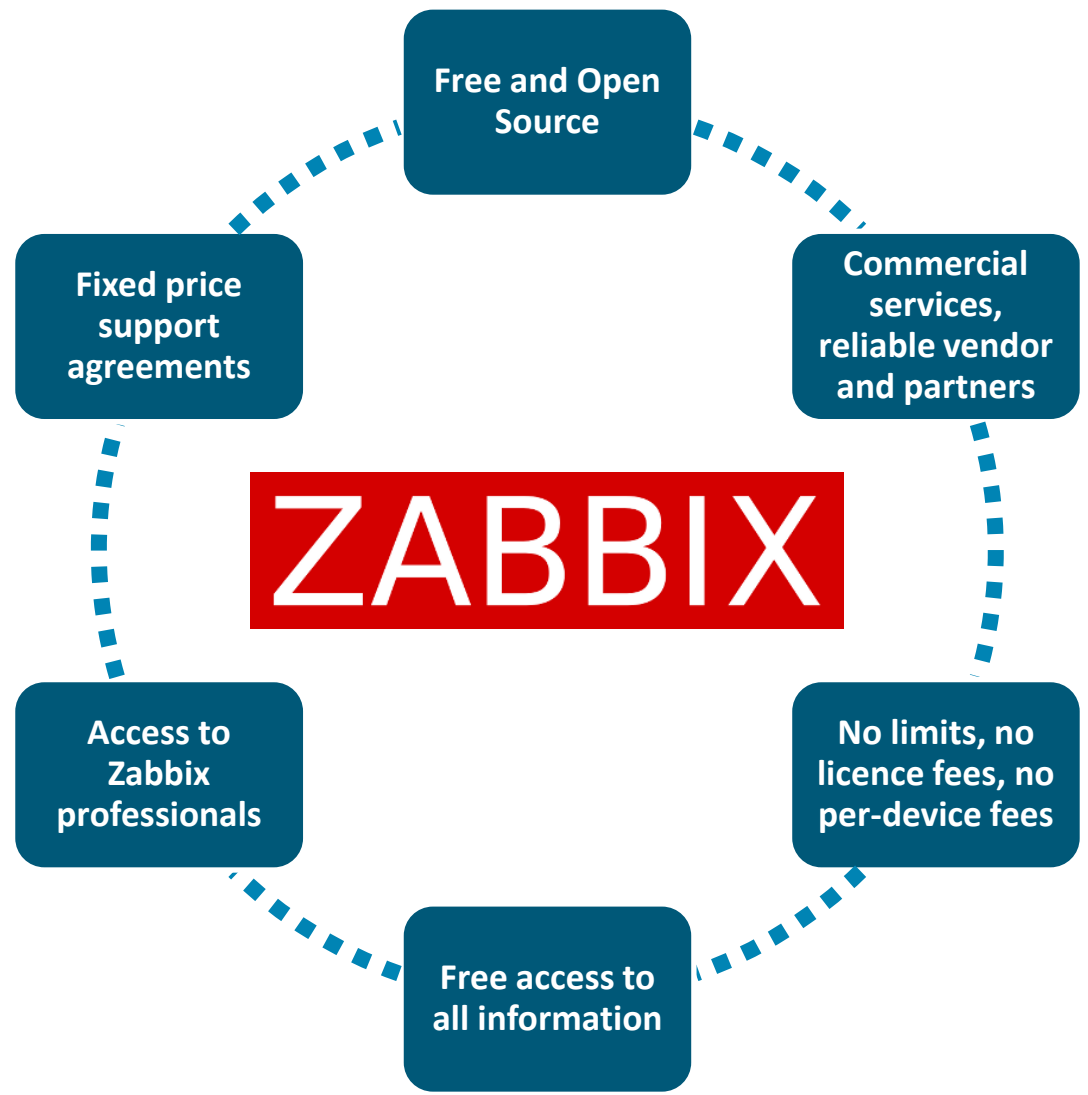
All-in-one monitoring platform



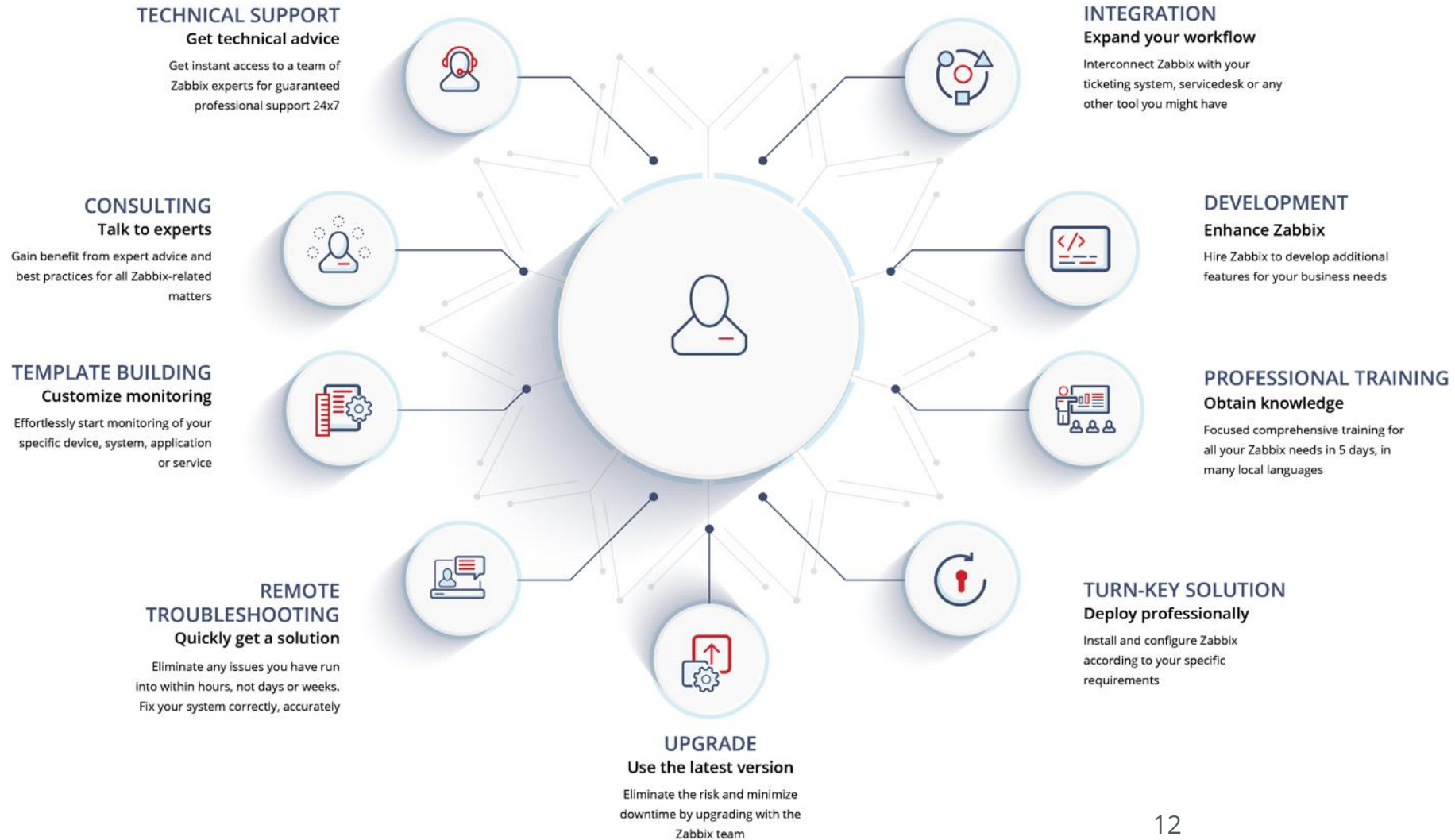
Data collection >>> Real-time data processing >>> [Actions & Visualization]

COST OF ZABBIX

Exceptionally low TCO



YOU'RE COVERED: 24X7 PROFESSIONAL SERVICES

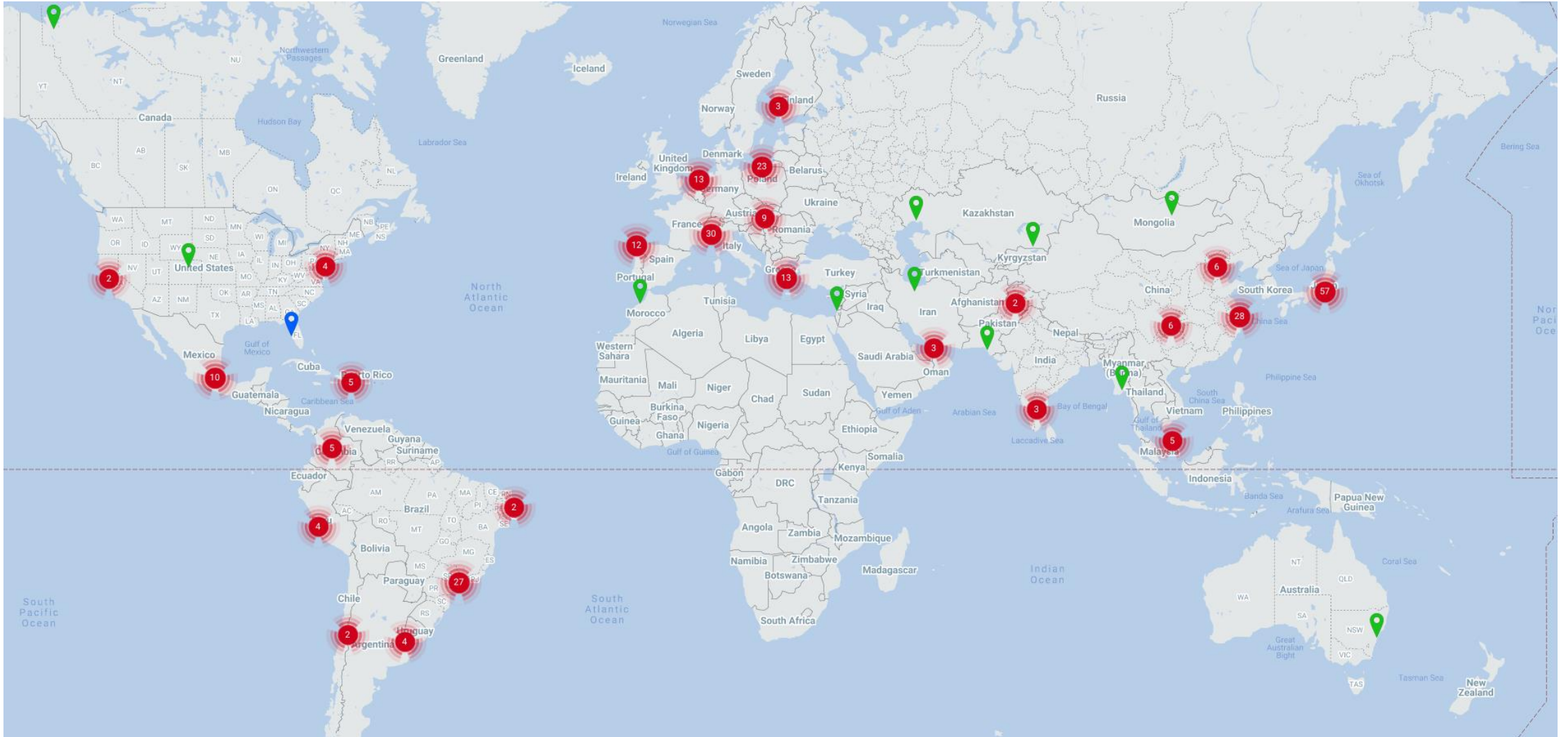


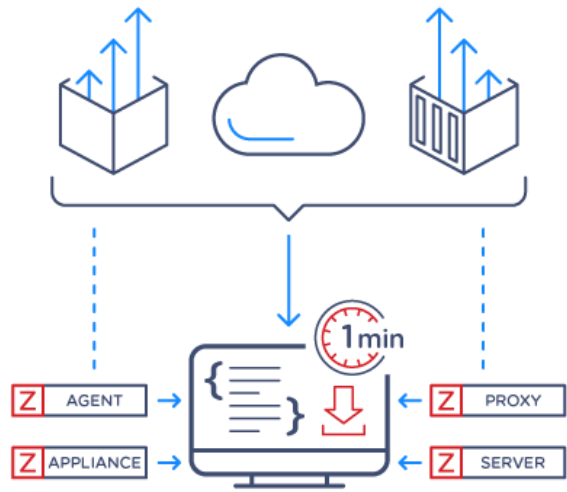
10TH ZABBIX SUMMIT 2022

THANK



250 PARTNERS AROUND THE WORLD





Deploy anywhere

ON-PREMISE



IN THE CLOUD







































































































































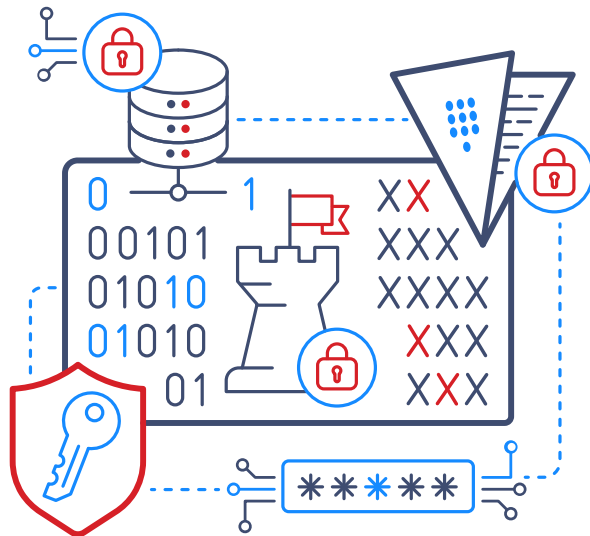
Monitor **anything**

Legacy and modern systems, **ready for the future**

OUT OF THE BOX MONITORING

 .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	 Geckboard	 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

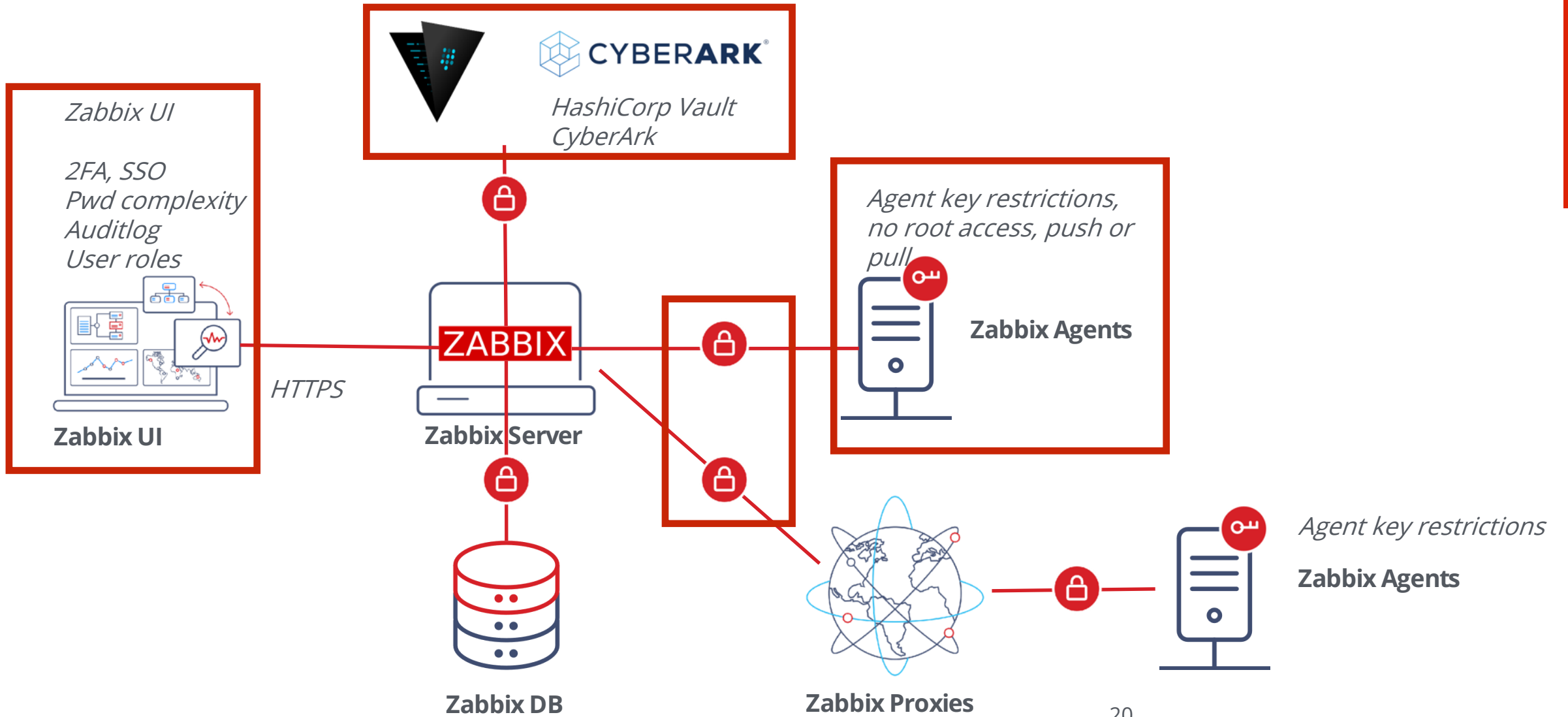
zabbix.com/integrations



Security **on all levels**

Highest security standards, verified by independent researchers

SECURE BY DESIGN





Bug bounty

ISO/IEC 27001

<https://www.zabbix.com/pr/pr429>

Zabbix Security Advisories and CVE database

[How to report a security issue?](#)

[Zabbix versions \(7\)](#) ▼

Zabbix ID	CVE number	CVSS	Zabbix	Synopsis	Component/s	Affected version/s	Published
ZBV-2022-12-1	CVE-2022-43516			<p>CVE/Advisory number: CVE-2022-43516</p> <p>Synopsis: Zabbix Agent installer adds "allow all TCP any any" firewall rule</p> <p>Description: A Firewall Rule which allows all incoming TCP connections to all programs from any source and to all ports is created in Windows Firewall after Zabbix agent installation (MSI)</p> <p>Known Attack Vectors: An attacker can connect to all TCP services running on the machine with Zabbix Agent</p> <p>Resolution: To remediate this vulnerability, apply the updates listed in the 'Fixed Version' section to appropriate products or use the workaround</p> <p>Workarounds: If an immediate update is not possible, change the applied local firewall rule to allow the agent port only.</p> <p>Acknowledgements: Joshua PowellNishiyama</p>		MSI pkg. (29.oct.22 - 2.dec.22)	2022 Nov 30
ZBA-2022-10-1	-					<=v6.0.8 (Solaris) all versions <=31/Oct/2022	2022 Oct 31
ZBV-2022-10-1	CVE-2022-43516					4.0.0-4.0.44 5.0.0-5.0.29 6.0.0-6.0.9 6.2.0-6.2.4	2022 Oct 18
ZBV-2022-09-1	CVE-2022-43516					6.0.0-6.0.11 6.2.0-6.2.5	2022 Sep 21
ZBA-2022-07-1	-			Zabbix products are not affected by CVE-2022-2068 vulnerability in OpenSSL			2022 Jul 26
ZBV-2022-07-1	CVE-2022-40626	4.8	Medium	Reflected XSS in action configuration window of Zabbix Frontend	Frontend	6.0.0-6.0.6 6.2.0	2022 Jul 08

Component/s	Affected version/s	Fix version/s	CVSS score	Zabbix severity	Tickets
Agent, Agent2	MSI pkg. (29.oct.22 - 2.dec.22)	MSI pkg. => 3.dec.22	6.5	Medium	ZBX-22002



Data processing platform

Real-time data collection and analysis

ZABBIX FEATURES

All benefits of Zabbix in one place

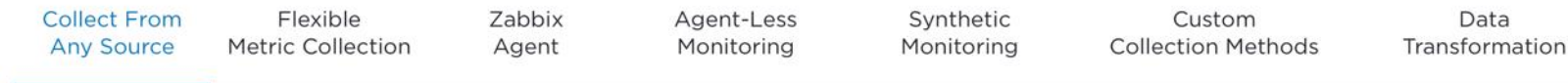
Use as a reference

Answers many FAQs

zabbix.com/features



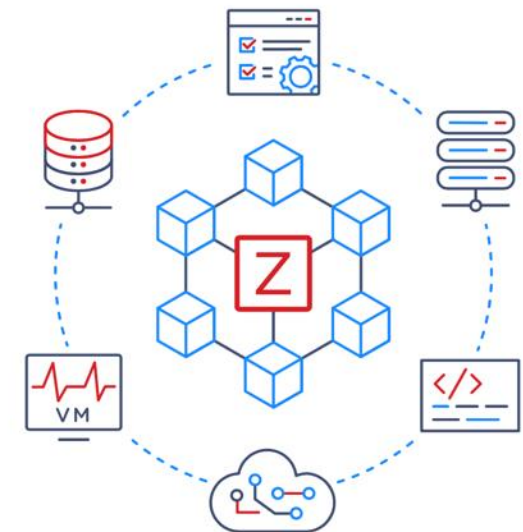
Keep control of your infrastructure by collecting any metric from any source



Collect metrics from any source

Zabbix enables you to collect metrics but isn't limited to:

- ✓ Network devices
- ✓ Cloud services, containers, virtual machines
- ✓ OS level monitoring
- ✓ Log files
- ✓ Databases
- ✓ Applications
- ✓ Services
- ✓ IoT sensors
- ✓ Web page monitoring
- ✓ HTTP/HTTPS endpoint monitoring
- ✓ Support for full range of industry standard protocols
- ✓ Collect data from external API end-points



6.0 LTS

6.2

6.4

7.0 LTS



Zabbix 6.4

A huge step ahead

ZERO-DOWNTIME UPGRADE OF PROXIES

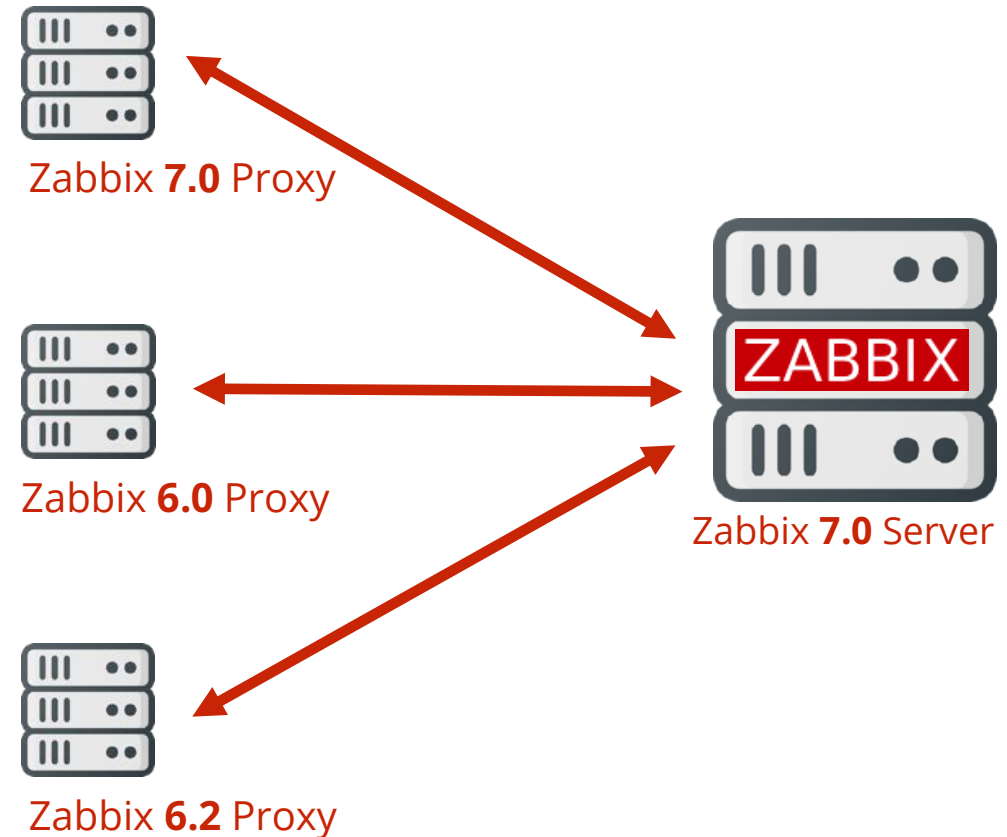
Before Zabbix 6.4:

All Zabbix components (except agents) must be upgraded simultaneously

Zabbix 6.4:

Older proxies will **continue to process data**

Creates a longer **time window** for upgrade



THE CONCEPT OF CAUSE AND SYMPTOM EVENTS

The screenshot shows a table of monitoring events. The table has columns for Time, Severity, Recovery time, Status, Info, Host, Problem, Duration, Ack, Actions, and Tags. Two events are selected, and a context menu is open over the 'Service is down' event. The menu options are: VIEW, Problems, CONFIGURATION, Trigger, Items, PROBLEM, Mark as cause, Mark selected as symptoms (highlighted in red), LINKS, and Trigger URL. A 'Mass update' button is visible at the bottom left of the table.

	Time	Severity	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
<input type="checkbox"/>	2022-09-09 07:44:56	Warning		PROBLEM		Zabbix server	High swap space usage (less than 50% free)	11d 4h 53m	No		class: os component: memory component: storage ...
<input type="checkbox"/>	2022-09-07 15:26:10	Average		PROBLEM		Apache	Interface eno1: Link down	11d 23h 12m	No		
<input checked="" type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Service is down	11d 23h 12m	No		
<input checked="" type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Failed to fetch status page	11d 23h 12m	No		
<input type="checkbox"/>	2022-09-09 07:44:50	Information		PROBLEM		Zabbix server	System name has changed	10d 7h 23m	No		class: os component: memory component: storage ...

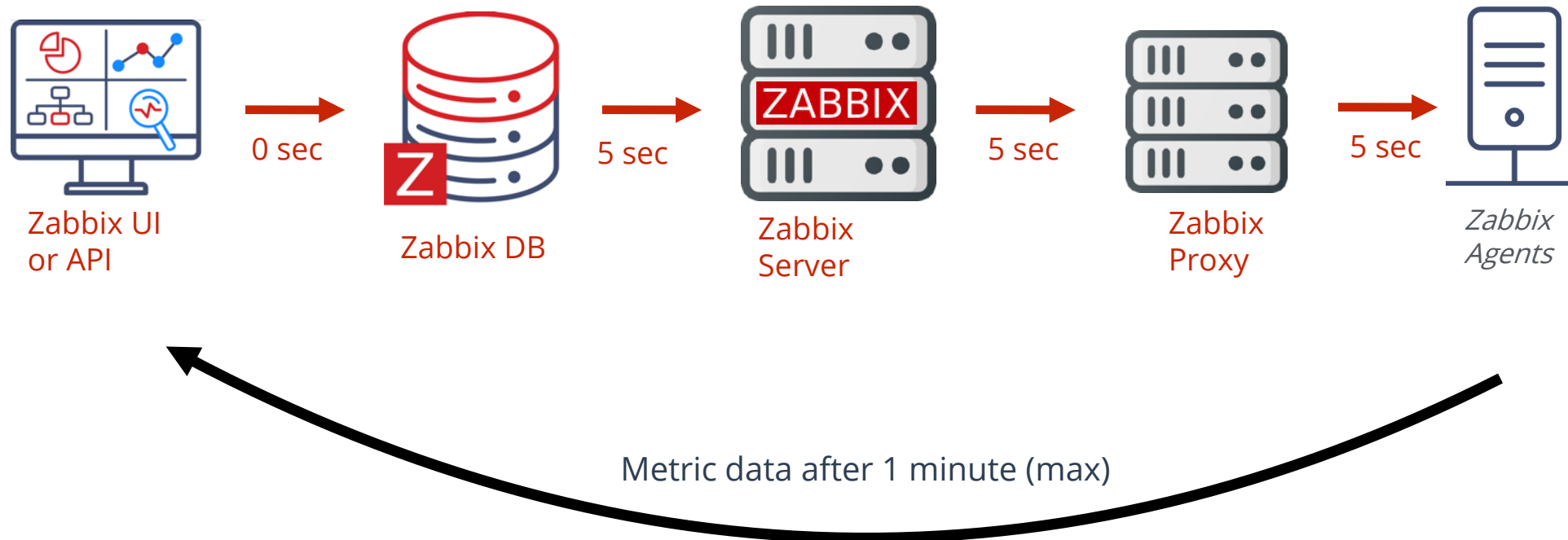
The screenshot shows the same table of monitoring events. The 'Service is down' event is now highlighted in red, indicating it has been marked as a symptom. A red box highlights the entire row for this event. A tooltip labeled 'Symptom' is visible over the event's checkbox.

	Time	Severity	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
<input type="checkbox"/>	2022-09-09 07:44:56	Warning		PROBLEM		Zabbix server	High swap space usage (less than 50% free)	10d 7h 23m	No		class: os component: memory component: storage ...
<input checked="" type="checkbox"/>	2022-09-07 15:26:10	Average		PROBLEM		Apache	Interface eno1: Link down	11d 23h 42m	No		
<input type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Service is down	11d 23h 38m	No		
<input type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Failed to fetch status page	11d 23h 38m	No		
<input type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Service is down	11d 23h 38m	No		
<input type="checkbox"/>	2022-09-07 15:26:06	Average		PROBLEM		Apache	Failed to fetch status page	11d 23h 38m	No		
<input type="checkbox"/>	2022-09-09 07:44:56	Information		PROBLEM		Zabbix server	System name has changed	10d 7h 23m	No		class: os component: memory component: storage ...

INSTANT CONFIGURATION UPDATE

Configuration sync will support **incremental updates**

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



JIT USER PROVISIONING

Automatic user provisioning

Auto-creation of users for **LDAP** and **SAML**

Management of users and their rights

Automatic mapping of user rights to user groups

Support of **SCIM** provisioning



REAL-TIME DATA STREAMING

Connectors for real-time streaming of metrics and events

ML, AI anomaly detection



Zabbix
Server



New connector

* Name

Protocol Zabbix Streaming Protocol v1.0

Data type Item values Trigger events

* URL

Tag filter And/Or Or

tag Equals value [Remove](#)

[Add](#)

TEMPLATE VERSIONING

Information about Vendor and Version

Templates

Template groups

Linked templates

Name

Vendor

Version

<input type="checkbox"/>	Name ▲	Hosts	Items	Triggers	Graphs	Dashboards	Discovery	Web	Vendor	Version
<input type="checkbox"/>	AIX by Zabbix agent	Hosts	Items 44	Triggers 10	Graphs 4	Dashboards 1	Discovery 2	Web	Zabbix	6.4-0
<input type="checkbox"/>	Linux by Prom	Hosts	Items 34	Triggers 12	Graphs 7	Dashboards 2	Discovery 3	Web	Zabbix	6.4-0



What's **next** ?

Zabbix 7.0 LTS and more

7.0 LTS

More value for the enterprise

General usability: UX and UI, ease of use

Cloud monitoring, visualization and reporting

Event and problem handling and processing

Extendability on all levels: agent plugins, UI modules, 3rd party widgets, webhooks

HA, scalability and load balancing

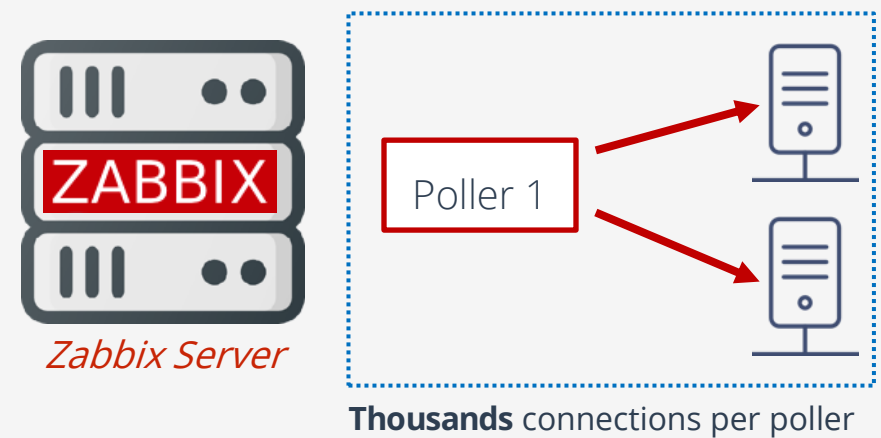
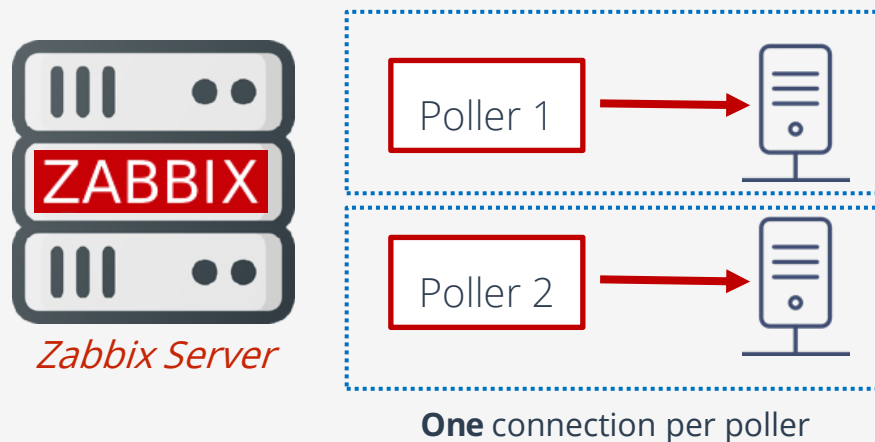
Lower maintenance cost

ASYNCHRONOUS DATA COLLECTION AND THREADS

One poller to handle **thousands of connections**

Much lower resource usage

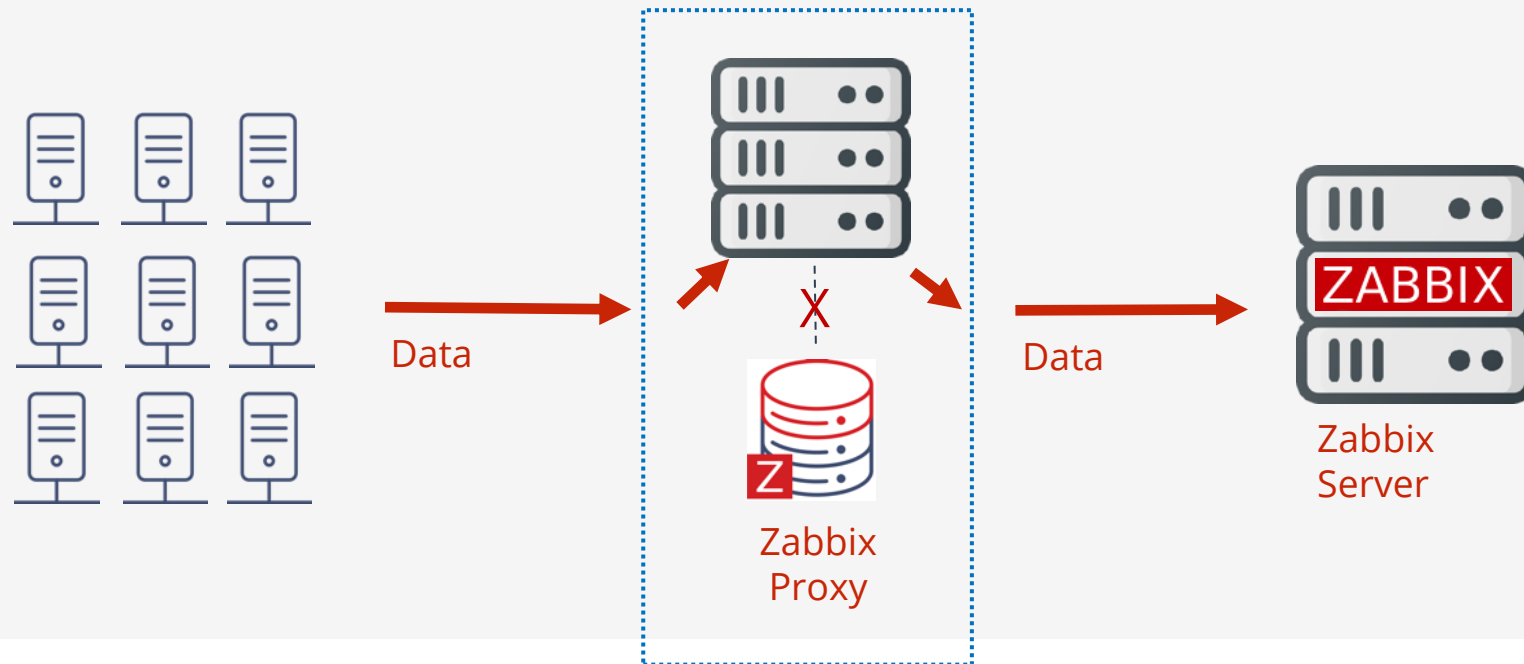
Enables **auto-scaling** of Zabbix configuration in the future



PERFORMANCE IMPROVEMENTS

10x faster permission checks for non-superadmins

In-memory data collection mode for proxies: faster and cheaper



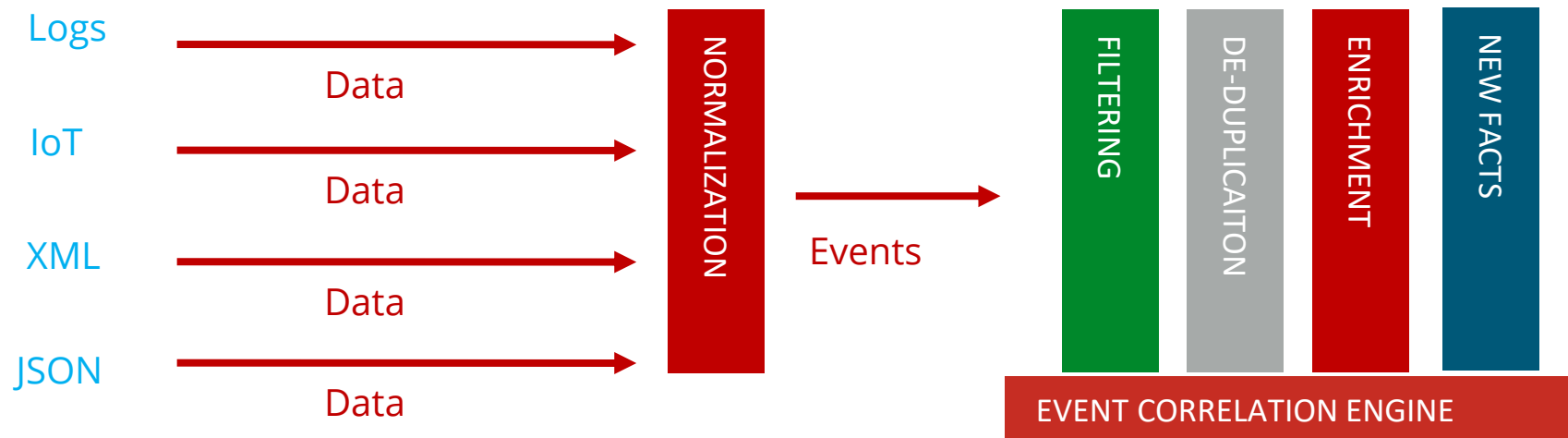
ADVANCED EVENT CORRELATION

Tag based event pre-processing and correlation

Event filtering, de-duplication, enrichment

Normalization and noise reduction

Generation of new facts



Zabbix events

PROXY LOAD BALANCING AND HA

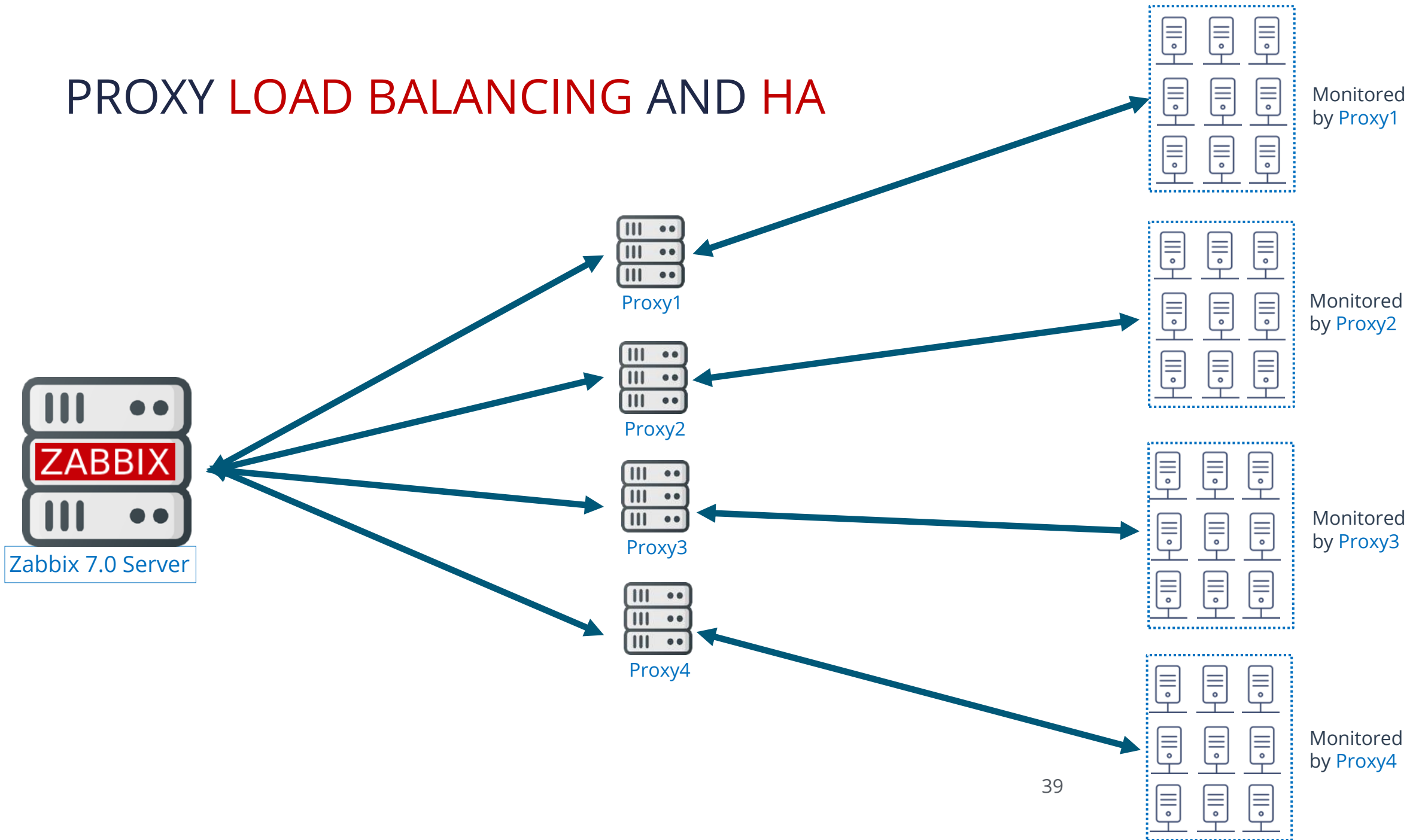
Use cases:

High availability of proxies

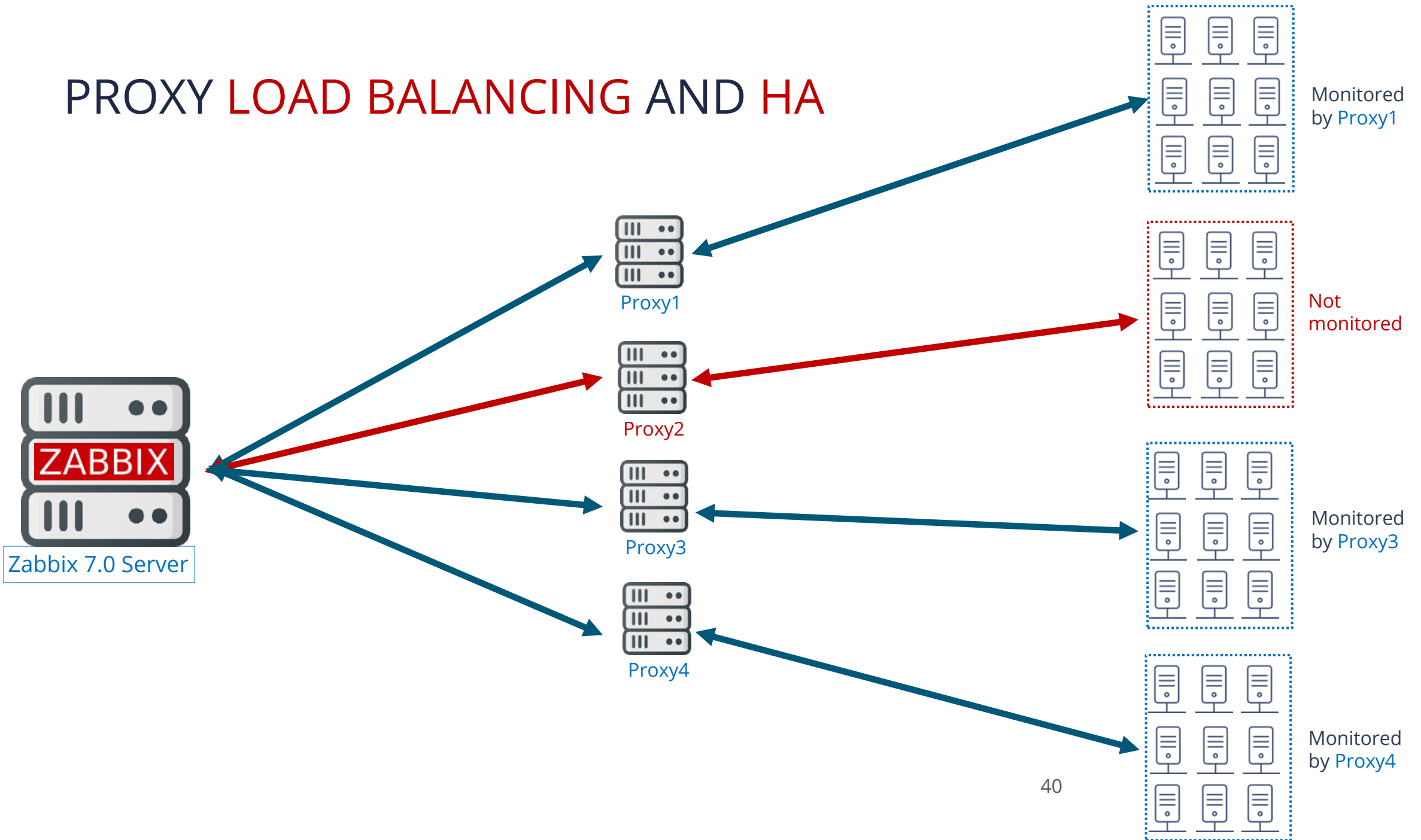
Load balancing: automatic distribution of hosts across group of proxies

Auto-scaling of proxies in K8S environment

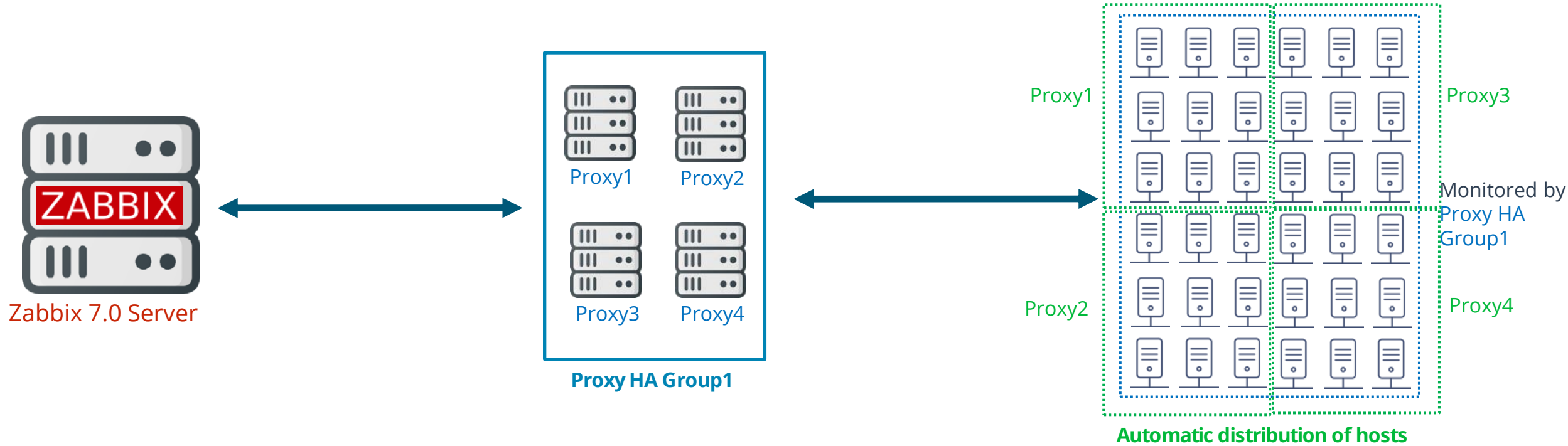
PROXY LOAD BALANCING AND HA



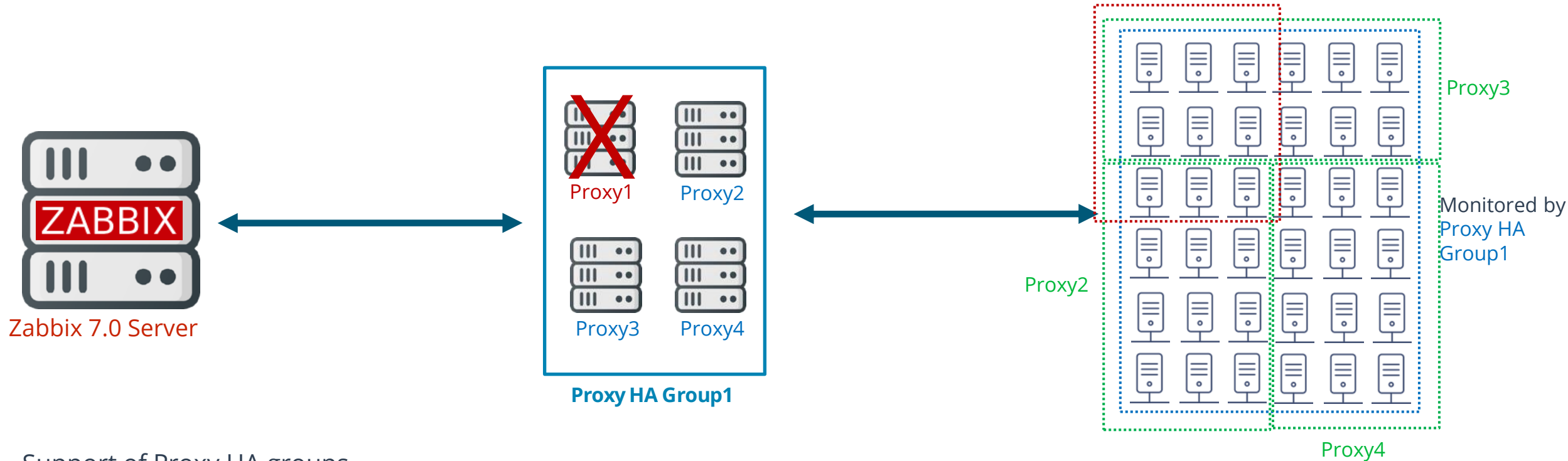
PROXY LOAD BALANCING AND HA



PROXY LOAD BALANCING AND HA



PROXY LOAD BALANCING AND HA

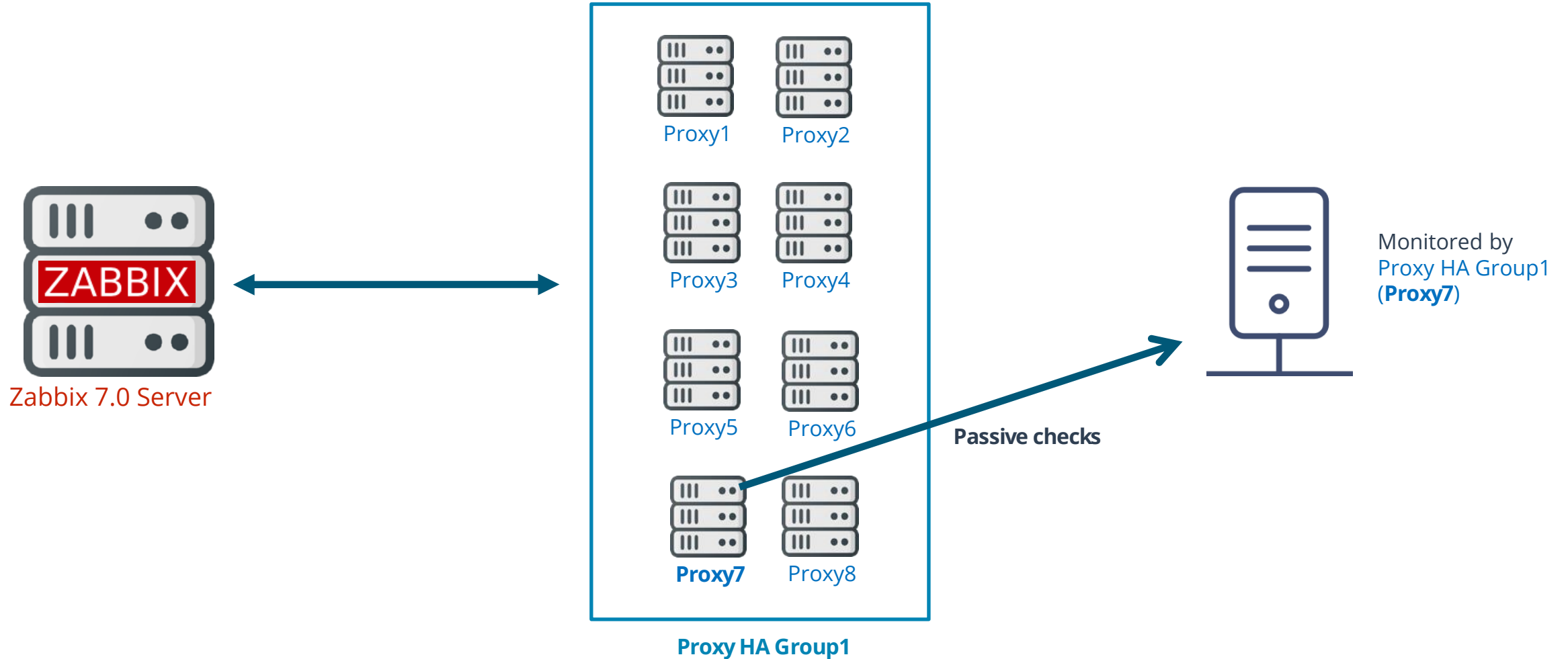


Support of Proxy HA groups

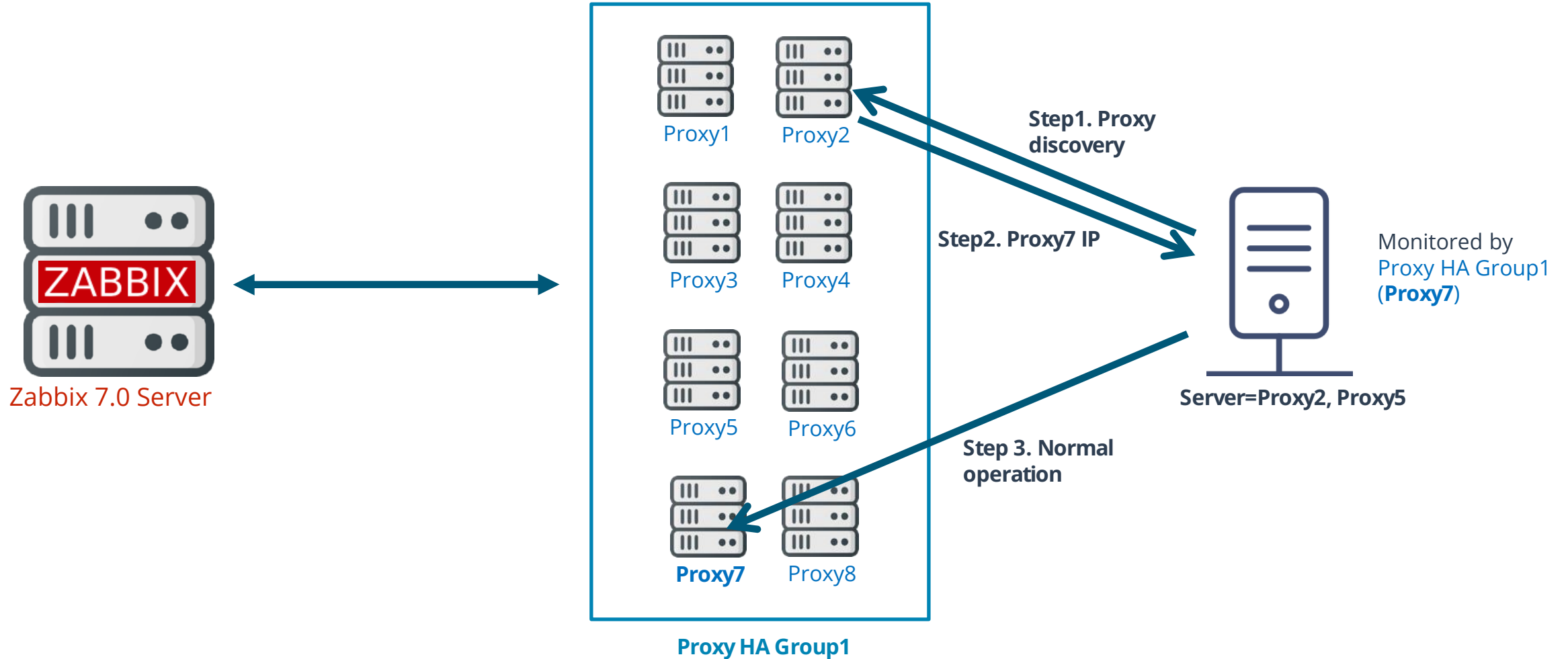
Proxy load balancing and HA by automatic assignment of hosts to proxies

A host can be monitored by Zabbix Server, a proxy or a proxy HA group

PROXY LOAD BALANCING AND HA



PROXY LOAD BALANCING AND HA



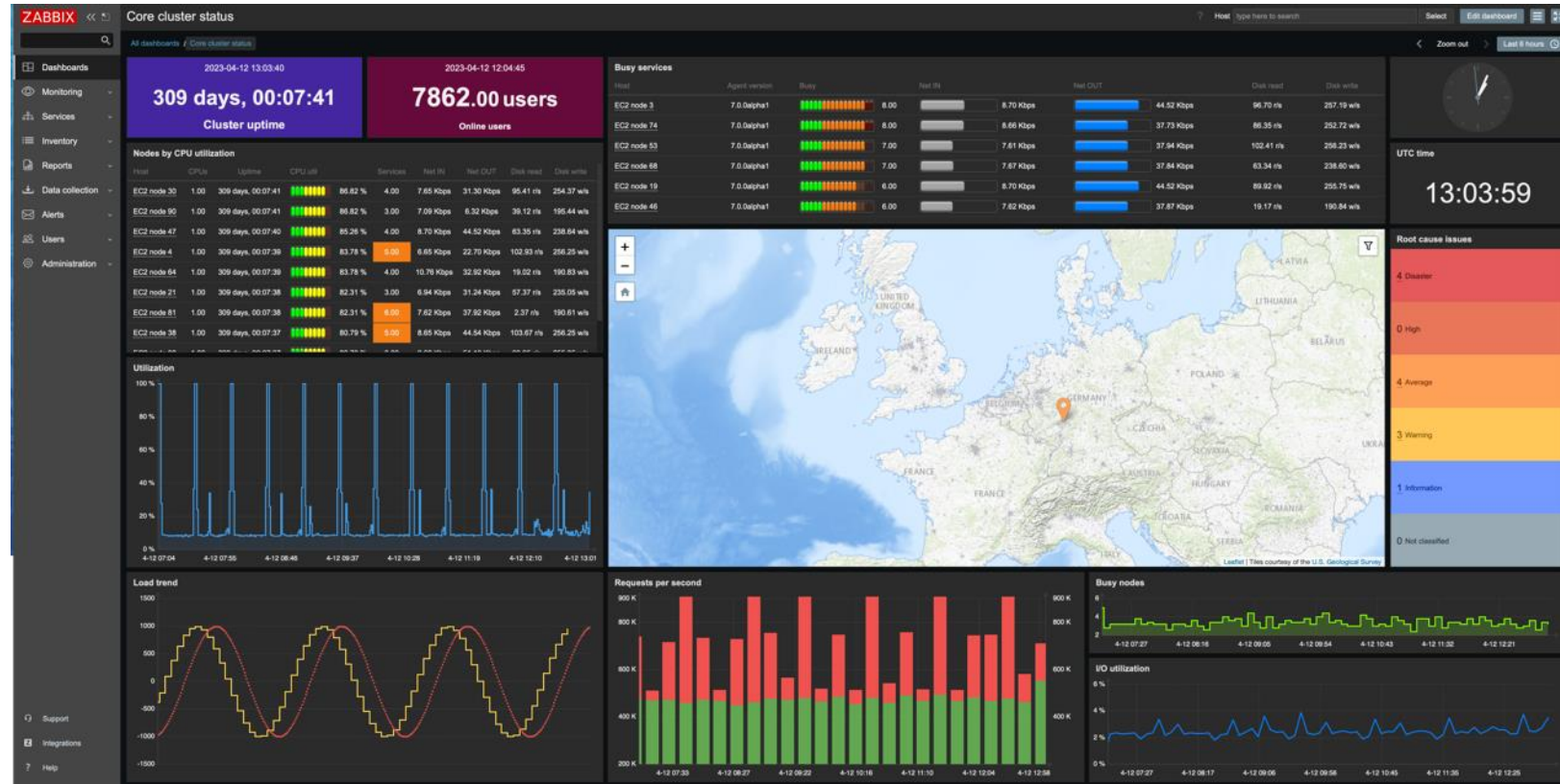
SINGLE PANE OF GLASS: VISUALIZATION

Dashboards navigation

One-click widget navigation

Stable framework for widget devs

Use all widgets everywhere
(host and global)



NEW WIDGETS FOR REAL-TIME AND REPORTING

Basic widgets

Pie and donut charts

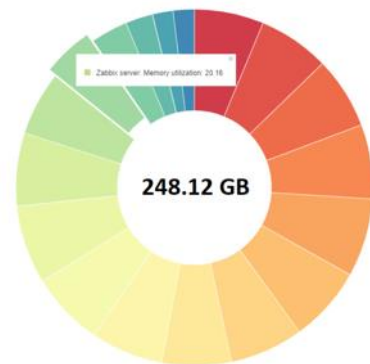
Gauge charts



Reporting

Capacity reports

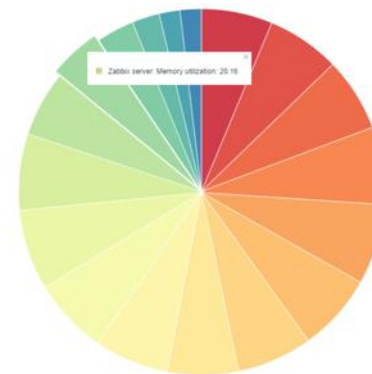
Top triggers widgets



Widgets navigators

Host navigator

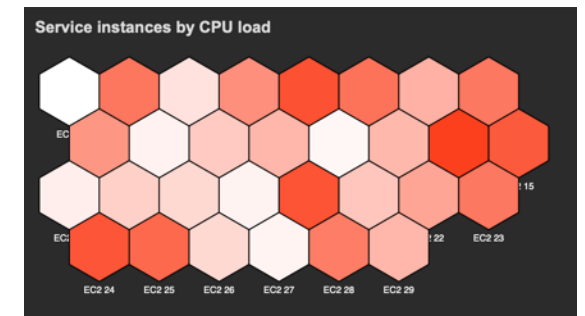
Item navigator



Advanced widgets

Hexagon host status

Zabbix topology



CENTRALISED MANAGEMENT OF ITEM TIMEOUTS

Now, *zabbix_server.conf*:

Global **Timeout=3**

Zabbix 7.0 LTS:

Global, Proxy and item level timeouts

Managed from Zabbix UI

The screenshot displays the Zabbix configuration interface. At the top, there is a 'Custom intervals' section with a table:

Type	Interval	Period	Action
Flexible Scheduling	50s	1-7,00:00-24:00	Remove

Below the table is an 'Add' button. Underneath, a 'Timeout' setting is shown with a value of '3s' and a 'Change Timeouts' link. This entire section is highlighted with a red box. At the bottom, there is a '* History storage period' section with two options: 'Do not keep history' and 'Storage period' (selected) with a value of '7d'.

REAL-TIME DATA INGESTION

Connectors for real-time ingestion of metrics

HTTPS
gRPC
SNMP traps



Zabbix Server

HOST A
HOST B
HOST C



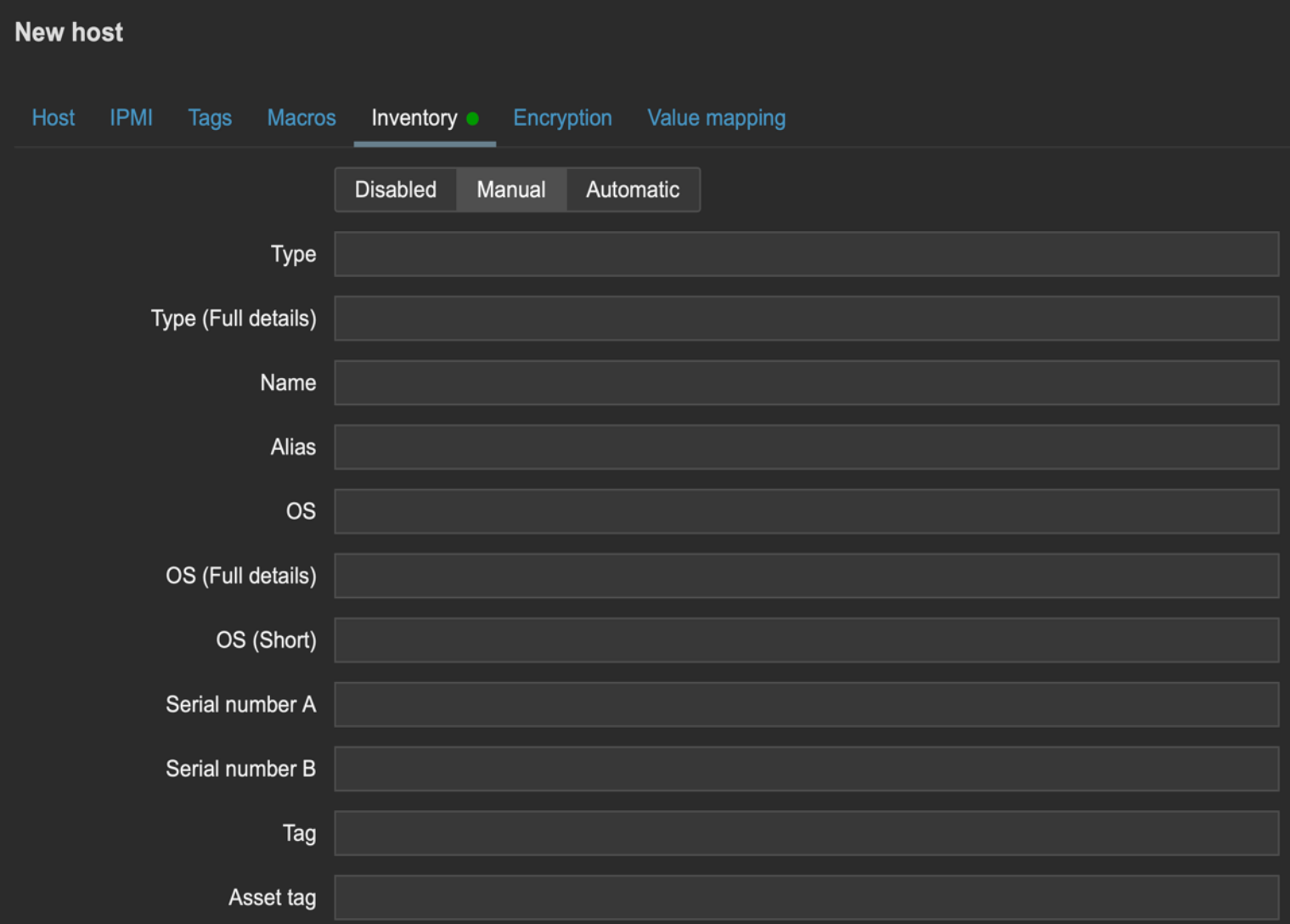
CUSTOM INVENTORY FIELDS

Now:

Fixed fields

Zabbix 7.0 LTS:

Extend using templates



New host

Host IPMI Tags Macros **Inventory** Encryption Value mapping

Disabled Manual Automatic

Type

Type (Full details)

Name

Alias

OS

OS (Full details)

OS (Short)

Serial number A

Serial number B

Tag

Asset tag

BACKLOG AND USABILITY IMPROVEMENTS

Other improvements

Inline form validation

Test function and Remote commands for **active** agents

Fixing awkward usability issues

User group Template permissions **Host permissions** ● Problem tag filter

Permissions	Host group	Permissions
	All groups	None
	Zabbix infrastructure	Read-write Read Deny None

type here to search Select Read-write Read Deny None

Include subgroups

[Add](#)

Update Delete Cancel

Zabbix 7.0 LTS

Planned release date: Q4 2023

Enhanced interoperability

- Time-series data ingestion from 3rd party systems
Flexible data gateway for ingesting time-series data in various formats using various protocols
★ Top voted!
- Custom inventory fields **In design**
Ability to customise inventory fields
[ZBXNEXT-336](#) ★ Top voted!

Advanced visualization and reporting

- Communication framework for widgets **In dev**
Widgets will be able to talk to each other enabling creation of new types of widgets and dynamic next-generation dashboards

New widgets for dashboards and reporting

- Gauge chart widget **In dev**
[ZBXNEXT-743](#) ★ Top voted!
- Pie and donut chart widget **In dev**
- TopN item widget
Displaying data table view for items from a single of multiple hosts, also for LLD items
[ZBXNEXT-4036](#)
- Top100 triggers widget **In dev**
[ZBXNEXT-6973](#)
- Host tree navigation widget **In design**
- Item tree navigation widget **In design**

Status

New

In design

In dev

Ready

LOOKING IN THE FUTURE

8.0 LTS

Data processing platform

Open Telemetry integration

APM + tracing

Log management

Advanced event processing and correlation

Performance and scalability

Use of AI and ML for advanced monitoring, anomaly detection and analytics

Thank you!