

ZABBIX

5.4

**RELEASE
DAY!**

PORTUGUESE



O que há de novo no Zabbix 5.4

Luciano Alves,
CEO Zabbix LatAm

ZABBIX

LATIN AMERICA

AGENDA

- ✓ New functionality of Zabbix 5.4
- ✓ What we are working on now





Zabbix 5.4

Zabbix 5.4.0 was released in May 17



Reporting and Visualization

REPORTING AND VISUALIZATION

- ☑ Zabbix 5.2: pre-defined views for Monitoring->Problems

Problems

< All problems 212 Services 9 High severity problems 13

Show **Recent problems** Problems History

Host groups

Hosts

Triggers

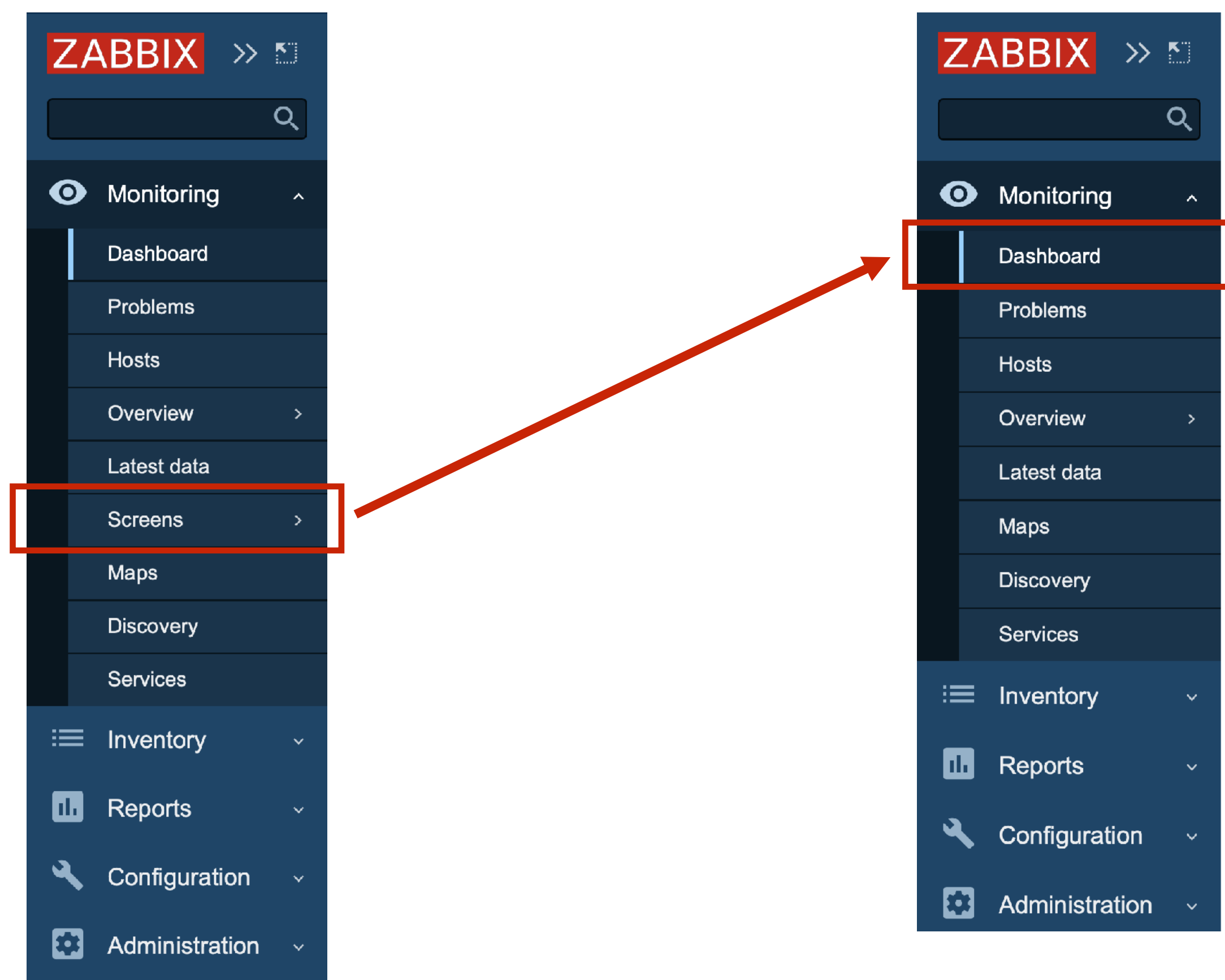
Problem

Severity ☐ Not classified ☐ Warning ☐ High
☐ Information ☐ Average ☐ Disaster

Age less than ☐ 14 days

UNIFICATION OF SCREENS AND DASHBOARDS

- ✓ Unification of screens and dashboards, no ~~screens~~ anymore!



TEMPLATES FOR DASHBOARDS

Configuration->Templates:

Z

Search

Eye

Menu

Dashboard

Dashboards

Create dashboard

All templates / App Nginx by Zabbix agent Items 17 Triggers 6 Graphs 4 Dashboards 1 Discovery rules Web scenarios

☐ Name ▲

☐ Nginx performance

Displaying 1 of 1 found

Monitoring->Hosts:

Z

Search

Eye

Menu

Dashboard

Hosts

Fullscreen

< Home >

Name ▲	Interface	Availability	Tags	Problems	Status	Latest data	Problems	Graphs	Dashboards	Web
cdn.example.com	1.2.3.4.5:32050	ZBX	Service: CDN	2	Enabled	Latest data	Problems 2	Graphs 12	Dashboards 2	Web

Displaying 1 of 1 found



All hosts / cdn.example.com / Nginx performance

Nginx performance

< Z System performance

Nginx: Connections by state

	[avg]	last	min	avg	max
Nginx: Connections active	[avg]	7	1	4.1034	94
Nginx: Connections waiting	[avg]	6	0	3.069	93
Nginx: Connections writing	[avg]	1	1	1	3
Nginx: Connections reading	[avg]	0	0	0	0

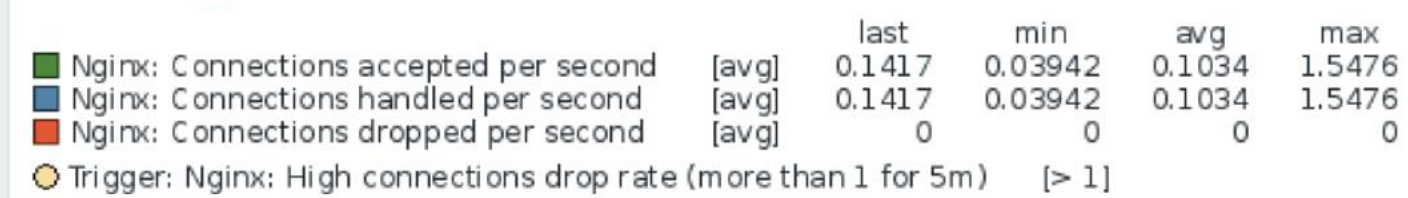
Nginx: Requests per second

	[avg]	last	min	avg	max
Nginx: Requests per second	[avg]	0.1084	0.01314	0.07033	1.531

Nginx: Connections per second

	[avg]	last	min	avg	max
Nginx: Connections accepted per second	[avg]	0.1417	0.03942	0.1034	1.5476
Nginx: Connections handled per second	[avg]	0.1417	0.03942	0.1034	1.5476
Nginx: Connections dropped per second	[avg]	0	0	0	0

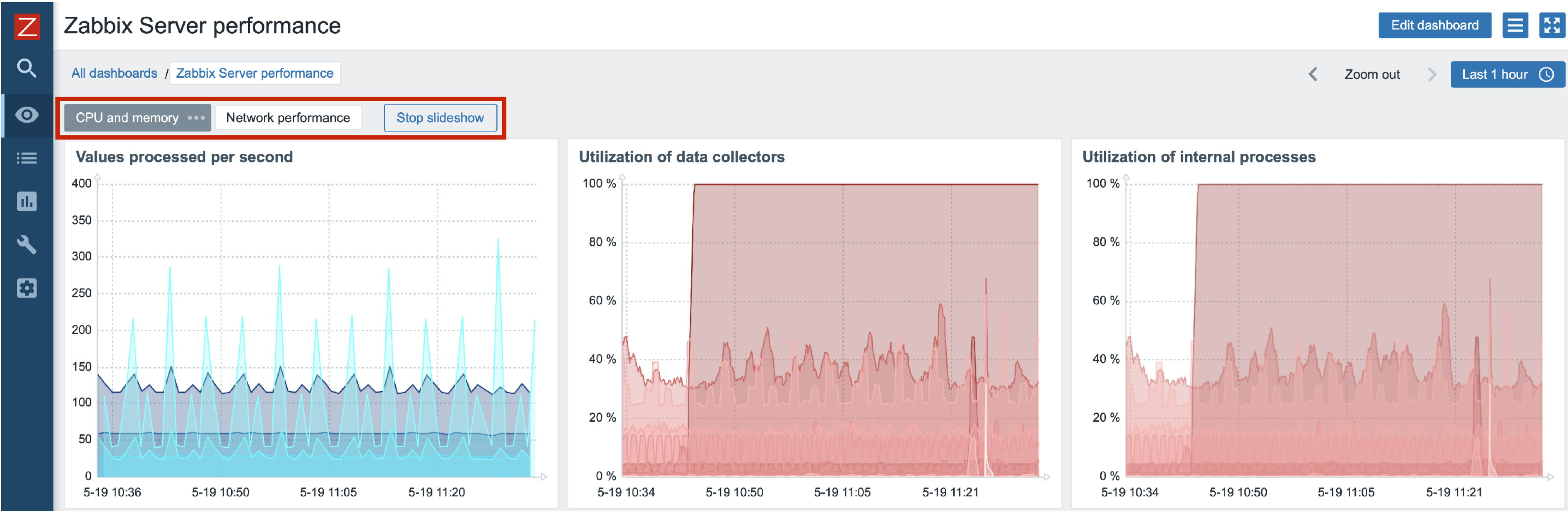
Trigger: Nginx: High connections drop rate (more than 1 for 5m) >= 1



MULTI-PAGE DASHBOARDS

The screenshot displays the Zabbix web interface for 'Zabbix Server performance'. The top navigation bar includes a search icon, a breadcrumb trail 'All dashboards / Zabbix Server performance', and two tabs: 'CPU and memory' (active) and 'Network performance'. A '+ Add' button is visible next to the tabs. Below the tabs, three widgets are shown: 'Values processed per second' (a line graph with blue and green series), 'Utilization of data collectors' (a bar chart with red bars), and 'Utilization' (another bar chart with red bars). A 'Dashboard page properties' dialog box is open in the center, containing a 'Name' field with the value 'Internal stats' and a 'Page display period' dropdown menu set to 'Default (30 seconds)'. The dialog has 'Apply' and 'Cancel' buttons. A context menu is also visible, showing options: 'Add widget', 'Add page' (highlighted with a red border), 'Paste widget', and 'Paste page'. The background of the dashboard shows various system icons and network diagrams.

MULTI-PAGE DASHBOARDS



SCHEDULED PDF REPORTS

Reports->Scheduled reports

ZABBIX << Scheduled reports Create report

Filter

Name Show **All** Created by me Status **Any** Enabled Disabled Expired Apply Reset

<input type="checkbox"/> Name ▲	Owner	Repeats	Period	Last sent	Status	Info
<input type="checkbox"/> CEO KPIs report	alex (Alexei Vladishev)	Daily	Previous day	Never	Enabled	i
<input type="checkbox"/> Weekly management report	james (James Smith)	Weekly	Previous week	Never	Enabled	
<input type="checkbox"/> Zabbix health daily report	james (James Smith)	Daily	Previous day	Never	Enabled	i

Displaying 3 of 3 found

- ✓ Centralised management of reports
- ✓ Zabbix converts a dashboard to PDF and sends by email
- ✓ Works with any dashboard
- ✓ Accessible to all users but can be restricted by a new user role

Scheduled reports

* Ownerjames (James Smith) xSelect

* NameWeekly management report

* DashboardCEO xSelect

PeriodPrevious dayPrevious weekPrevious monthPrevious year

CycleDailyWeeklyMonthlyYearly

Start time07 : 00

* Repeat on☒ Monday☐ Thursday☐ Saturday
☐ Tuesday☐ Friday☐ Sunday
☐ Wednesday

Start date2021-05-17

End dateYYYY-MM-DD

SubjectWeekly management report

Message

Good morning!

Here is a new management report for the last week attached.

* Subscriptions

Recipient	Generate report by	Status	Action
james (James Smith)	Recipient	Include	Remove
Add user Add user group			

DescriptionWeekly management report showing KPIs for the last week.

Enabled☒

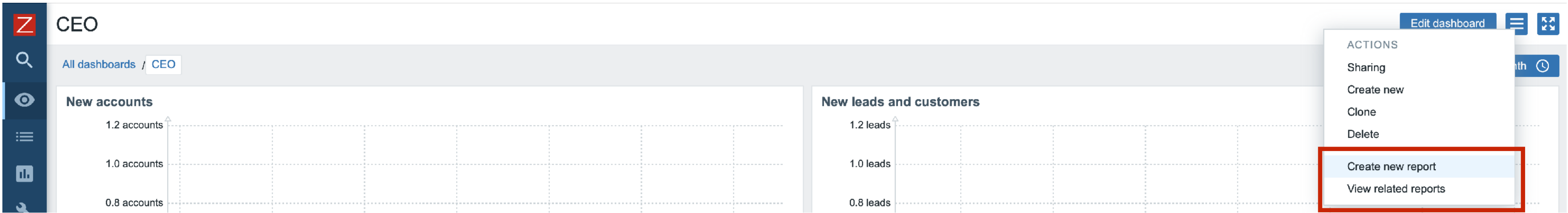
UpdateCloneTestDeleteCancel


- ✓ Scheduled daily, weekly, monthly, or yearly PDF reports

SCHEDULED PDF REPORTS

☑ Also accessible from dashboards!

Monitoring->Dashboards

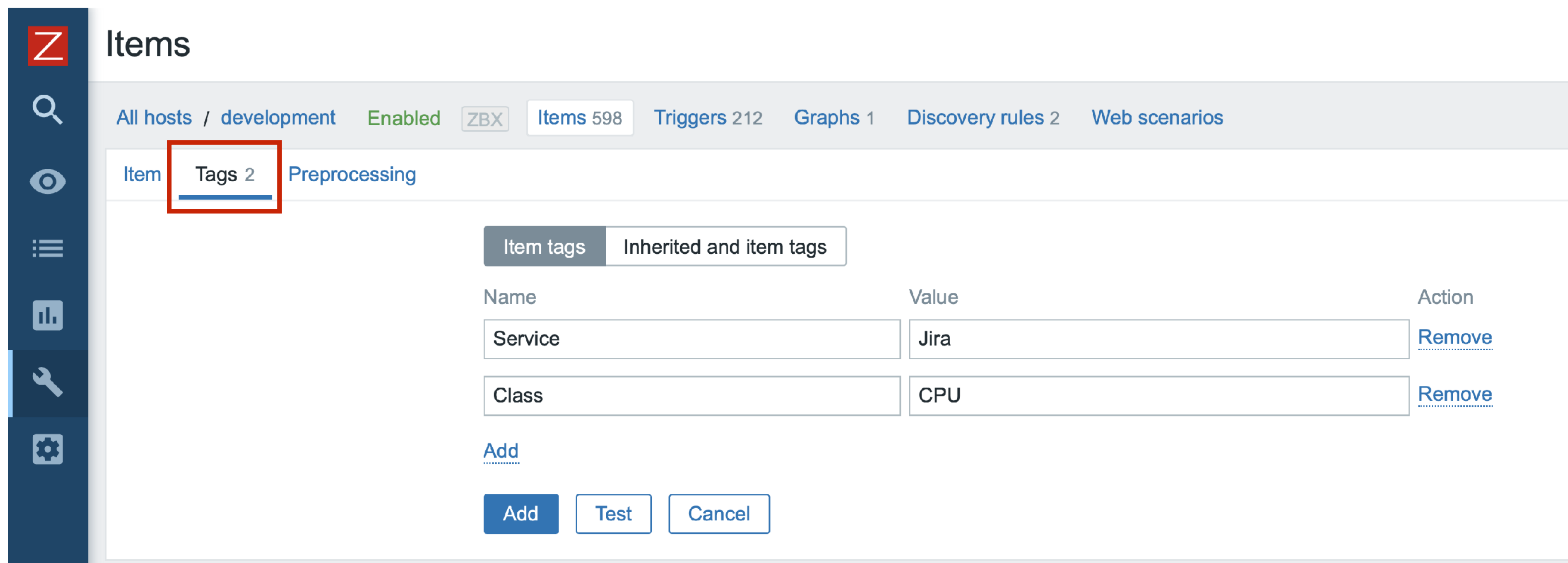




More simple and
more powerful

TAGS FOR ITEMS

- ✓ Tags for templates, hosts, host prototypes, triggers
- ✓ Zabbix 5.4: Now introduced for items, **no more applications!**



The screenshot shows the Zabbix 5.4 web interface. On the left is a dark blue sidebar with icons for search, monitoring, configuration, and settings. The main content area is titled 'Items'. Below the title is a breadcrumb trail: 'All hosts / development' (green), 'Enabled' (green), 'ZBX' (grey), 'Items 598' (white), 'Triggers 212' (blue), 'Graphs 1' (blue), 'Discovery rules 2' (blue), and 'Web scenarios' (blue). Below the breadcrumb trail are three tabs: 'Item' (blue), 'Tags 2' (white, highlighted with a red box), and 'Preprocessing' (blue). The 'Tags 2' tab is active, showing a table of item tags. The table has three columns: 'Name', 'Value', and 'Action'. There are two rows of tags: one with 'Service' as the name and 'Jira' as the value, and another with 'Class' as the name and 'CPU' as the value. Each row has a 'Remove' link in the 'Action' column. Below the table is an 'Add' link. At the bottom are three buttons: 'Add' (blue), 'Test' (white), and 'Cancel' (white).

Items

All hosts / development Enabled ZBX Items 598 Triggers 212 Graphs 1 Discovery rules 2 Web scenarios

Item **Tags 2** Preprocessing

Item tags Inherited and item tags

Name	Value	Action
Service	Jira	Remove
Class	CPU	Remove

[Add](#)

Add Test Cancel

- ✓ Automatically transformed into tag "Application: <app name>" during upgrade

OLD SYNTAX

- ✓ TRIGGERS: {host:key.func(params)}>0
- ✓ CALCULATED: 100*last("vfs.fs.size[/,free]/last("vfs.fs.size[/,total]"))
- ✓ AGGREGATE: grpsum["MySQL Servers","vfs.fs.size[/,total]",last]

NEW UNIFIED SYNTAX

- ✓ TRIGGERS: func(/host/key, params)>0
- ✓ CALCULATED: sum(/host/vfs.fs.size[*],free], 10m)
- ✓ AGGREGATE: min(avg_foreach(/*/qps?[group="PostgreSQL" and tag="Env:Production"], 5m))



ADVANTAGES

- ✓ Much more simple unified syntax for everything: triggers, calculated items
- ✓ Support of **absolute time periods** like last day, previous hour, etc
- ✓ Free of any limitations of the old syntax
- ✓ Powerful aggregations with selection of items **by tags, wildcards**, etc
- ✓ Function can be applied to result of other function: `func1(func2(item))`
- ✓ It is possible to have multiple items as function arguments: `min(item1, item2)`
- ✓ No more aggregated metrics: calculated metrics for everything!



NEW SET OF FUNCTIONS

Function group	Functions
Aggregate functions	avg, count, countunique, kurtosis, mad, max, min, skewness, stddevpop, stddevsamp, sum, sumofsquares, varpop, varsamp
Bitwise functions	bitand, bitlshift, bitnot, bitor, bitrshift, bitxor
Date and time functions	date, dayofmonth, dayofweek, now, time
History functions	change, first, fuzzytime, last, logeventid, logseverity, logsource, percentile, trendavg, trendcount, trendmax, trendmin, trendsum
Mathematical functions	abs, acos, asin, atan, atan2, avg, cbrt, ceil, cos, cosh, cot, degrees, e, exp, expm1, floor, log, log10, max, min, mod, pi, power, radians, rand, round, signum, sin, sinh, sqrt, sum, tan, truncate
Operator functions	between, in
Prediction functions	forecast, timeleft
String functions	ascii, bitlength, bytelength, char, concat, find, insert, left, length, ltrim, mid, repeat, replace, right, rtrim, trim

<https://www.zabbix.com/documentation/current/manual/appendix/functions>



API TOKENS

- ✓ Per-user named API tokens with expiry date
- ✓ New user role: **access to API tokens**
- ✓ Can be managed globally by super-admins

Support

Share

Help

User settings

Profile

API tokens

Sign out

API tokens

Create API token

Filter

Name Status Any Enabled Disabled
Expires in less than days Apply Reset

Name	Expires at	Created at	Last accessed at	Status
Customer portal token	2021-03-16 00:00:00	2021-03-15 11:12:27	Never	Enabled
History export token	2021-03-25 18:47:08	2021-03-25 18:47:09	Never	Enabled

Displaying 2 of 2 found

API TOKENS

- Any user having permissions can create it

ZABBIX

Monitoring

Inventory

Reports

Configuration

Administration

General

Proxies

Authentication

User groups

API tokens

Name

Token for export of events

User

james (James Smith)

Select

Description

The token will be used for export of events to Elastic

Set expiration date and time

☒

Expires at

2022-01-01 00:00:00

Enabled

☒

Add

Cancel

- Can be managed globally by super-admins

Z

API tokens

Create API token

Filter

<input type="checkbox"/>	Name	User	Expires at	Created at	Created by user	Last accessed at	Status
<input type="checkbox"/>	Customer portal token	alex (Alexei Vladishev)	2021-03-16 00:00:00	2021-03-15 11:12:27	alex (Alexei Vladishev)	Never	Enabled
<input type="checkbox"/>	History export token	alex (Alexei Vladishev)	2021-03-25 18:47:08	2021-03-25 18:47:09	alex (Alexei Vladishev)	Never	Disabled
<input type="checkbox"/>	Token for export of events	james (James Smith)	2022-01-01 00:00:00	2021-05-19 12:22:54	alex (Alexei Vladishev)	Never	Enabled

Displaying 3 of 3 found



EASY TO MANAGE TEMPLATES

- ✓ Each template element got a unique ID that helps to perform template updates in a safe way

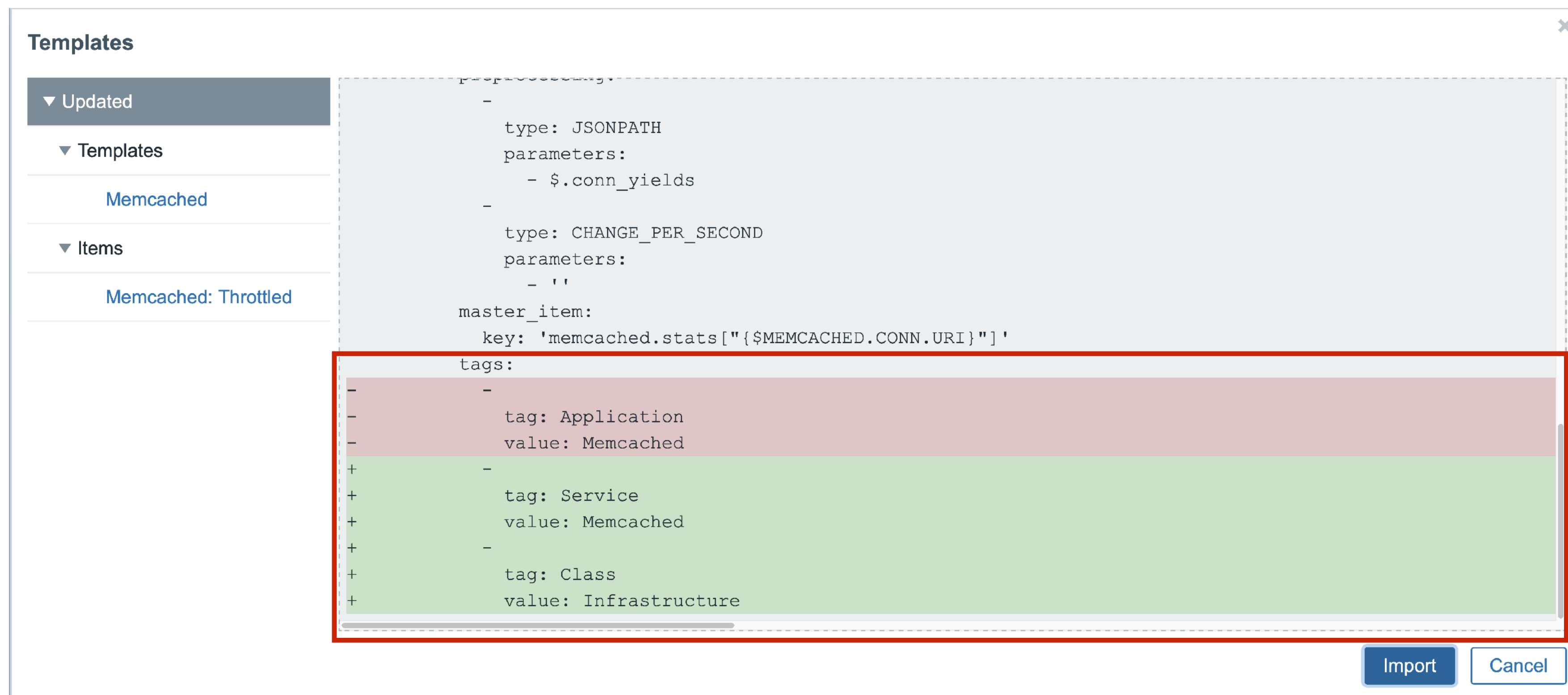
```
1  zabbix_export:
2    version: '5.4'
3    date: '2021-05-19T09:48:23Z'
4    groups:
5      -
6        uuid: a571c0d144b14fd4a87a9d9b2aa9fcd6
7        name: Templates/Applications
8    templates:
9      -
10       uuid: 05894ba2c9184d33992bf1bd21c347f6
11       template: Memcached
12       name: Memcached
13       description: |
14         Get Memcached metrics from plugin for the New Zabbix Agent (zabbix-agent2).
15
16         You can discuss this template or leave feedback on our forum https://www.zabbix.com
17
18         Template tooling version used: 0.38
```

- ✓ It also enables the ability to keep templates in the Git repository and push it to Zabbix by CI/CD pipeline using Zabbix API



BETTER IMPORT

- ✓ When importing a new template, Zabbix will clearly show you a difference with the existing template



SCALABILITY IMPROVEMENTS

- ✓ Zabbix Server and Proxy poller processes **do not require database connection** anymore
- ✓ In-memory **cache for trend data**, significant speedup for trend-related functions
- ✓ **Graceful startup** of Zabbix Server
- ✓ Better parallel data processing on Zabbix Server side for heavy loads



UNIVERSAL GLOBAL SCRIPTS

- ✓ Support of **JavaScript Webhooks** for easy integrations with 3rd party alerting and ticketing systems
- ✓ Global scripts can be used for: auto-remediation, alerting, integrations and manual actions for hosts and events

Scripts

* Name: Open a ticket in ServiceNow

Scope: **Action operation** Manual host action Manual event action

Type: **Webhook** Script SSH Telnet IPMI

Parameters	Name	Value	Action
	eventid	{EVENT.ID}	Remove
	severity	{EVENT.SEVERITY}	Remove
	tags	{EVENT.TAGSJSON}	Remove
	Add		

* Script: return 0

* Timeout: 30s

Description: Open new ticket in ServiceNow

Host group: All

[Update](#) [Clone](#) [Delete](#) [Cancel](#)

Actions

Action Operations

* Default operation step duration: 1h

Pause operations for suppressed problems: ☒

Operations: [Add](#)

Recovery operations: [Add](#)

Update operations: [Add](#)

* At least one o

[Add](#) [Ca](#)

Operation details

Operation: Send message

Steps: Send message Open a ticket in ServiceNow (0 - use action default)

Step duration: 0 (0 - use action default)

* At least one user or user group must be selected.

Send to user groups: User group Action [Add](#)

Send to users: User Action [Add](#)

Send only to: - All -

Custom message: ☐

Conditions: Label Name Action [Add](#)

[Add](#) [Cancel](#)

POWERFUL VALUE MAPS

- ✓ Exact match
- ✓ By range
- ✓ By regular expression

Z

Hosts

Search

Eye

Menu

Bar chart

Wrench

Settings

All hosts / Zabbix server Enabled ZBX Items 126 Triggers 65 Graphs 24 Discovery rules 3 Web scenarios

Host

Templates 2

IPMI

Tags

Macros

Inventory

Encryption

Value mapping

Name

Value

Action

Add

Update

Clone

Full clone

Delete

Cancel

Value mapping

* Name

Service state

* Mappings

Type	Value	Mapped to	Action
in range	0-31,64-127	Up	Remove
default		Down	Remove

Add

Add

Cancel



VALUES MAPS FOR TEMPLATES AND HOSTS

- ✓ No more global value maps! Now only for templates and hosts
- ✓ Advantages:
 - ✓ Flat self-contained templates without any references to global objects
 - ✓ Better multi-tenancy
- ✓ Mass-update operations for easier management

Mass update [X]

Host Templates IPMI Tags Macros Inventory Encryption Value mapping

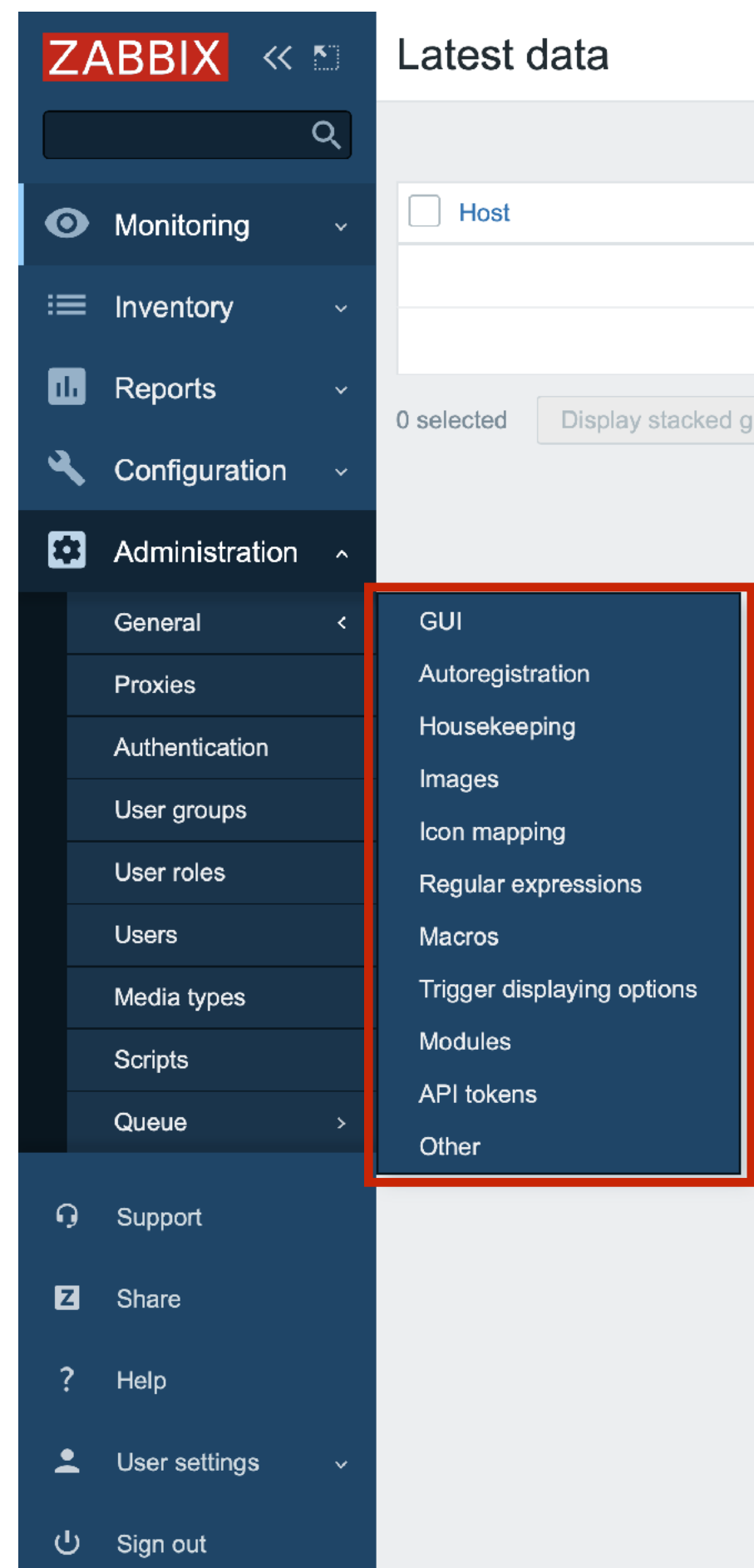
Value mapping ☒ Add Update Rename Remove Remove all

Name	Value	Action
Add	Add from	
<input type="checkbox"/> Update existing		

Update Cancel

USABILITY IMPROVEMENTS

- ✓ Third level menu for better navigation



USABILITY IMPROVEMENTS

- ✓ Stay focused: modal windows for mass-update and import forms

The screenshot displays the Zabbix 5.4 'Hosts' management interface. A modal window titled 'Mass update' is open, overlaying the host list. The modal has a red border and contains tabs for 'Host', 'Templates', 'IPMI', 'Tags', 'Macros', 'Inventory', 'Encryption', and 'Value mapping'. The 'Host' tab is active, showing four settings: 'Host groups' (checkbox), 'Description' (checkbox), 'Monitored by proxy' (checkbox), and 'Status' (checkbox), each with an 'Original' label. At the bottom of the modal are 'Update' and 'Cancel' buttons. In the background, the 'Hosts' table is visible, showing a single host named 'Zabbix server' with various metrics and a detailed description of its templates. The interface includes a 'Filter' button and a 'Displaying 1 of 1 found' status message.

Hosts

Create host Import

Filter

☐ Name ▲ Applications Items Triggers Graphs Discovery Web Interface Proxy Templates Status Availability Agent encryption Info Tags

☒ Zabbix server Applications 18 Items 126 Triggers 65 Graphs 24 Discovery 3 Web 127.0.0.1:10050 Linux by Zabbix agent (Linux block devices by Zabbix agent, Linux CPU by Zabbix agent, Linux filesystems by Zabbix agent, Linux generic by Zabbix agent, Linux memory by Zabbix agent, Linux network interfaces by Zabbix agent, Zabbix agent), Zabbix Server Enabled ZBX None

Displaying 1 of 1 found

1 selected Enable Disable

Mass update

Host Templates IPMI Tags Macros Inventory Encryption Value mapping

Host groups ☐ Original

Description ☐ Original

Monitored by proxy ☐ Original

Status ☐ Original

Update Cancel

USABILITY IMPROVEMENTS

- ✓ Negated filtering by tags

Z Problems

< [Home](#) **Excluding staging** [All issues](#) ▼ > [This year so far](#)

Show [Recent problems](#) [Problems](#) [History](#)

Host groups [Select](#)

Hosts [Select](#)

Triggers [Select](#)

Problem

Severity ☐ Not classified ☐ Warning ☐ High
☐ Information ☐ Average ☐ Disaster

Age less than ☐ 14 days

Host inventory [Add](#) [Remove](#)

Tags [And/Or](#) [Or](#)

[Re](#)

[Add](#)

Show tags ☐ None ☐ 1 ☐ 2 ☒ 3 ☐ Shortened ☐ None

Tag display priority

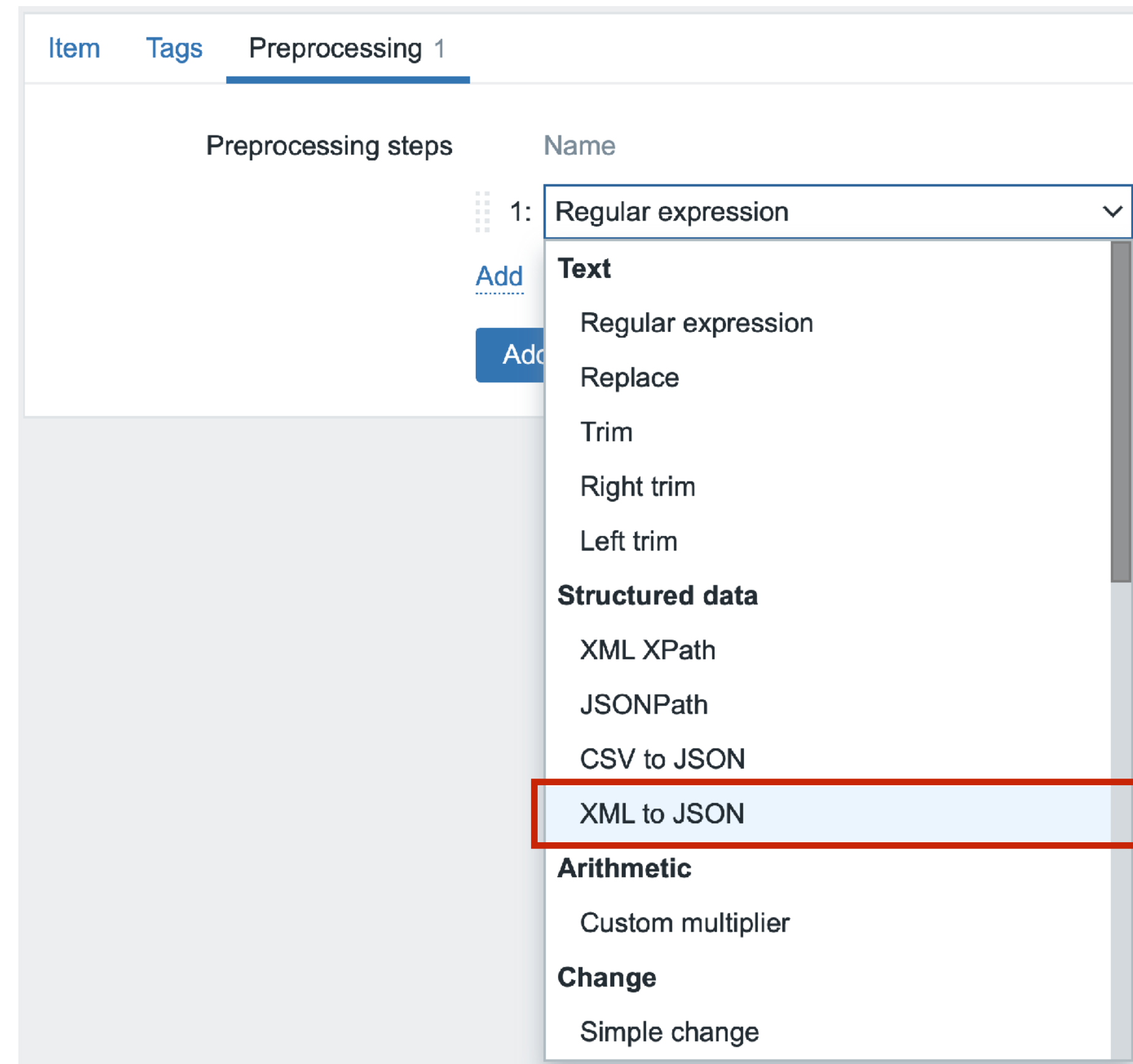
Show operational data ☒ None ☐ Separately ☐ W

Show suppressed problems ☐ Show unacknowledged only ☐

Does not equal
Exists
Equals
Contains
Does not exist
Does not equal
Does not contain

BETTER SUPPORT OF XML PREPROCESSING

- ✓ XML XPath
- ✓ Now also XML to JSON conversion



AND MORE!

✔ Security related

- ✔ Support of all SNMPv3 encryption protocols
- ✔ Unified error messages in case of unsuccessful login
- ✔ Disabled autocomplete for password fields in Zabbix UI

✔ Real-time export

- ✔ Information about event severity is included in real-time export files
- ✔ More granular configuration of real time export

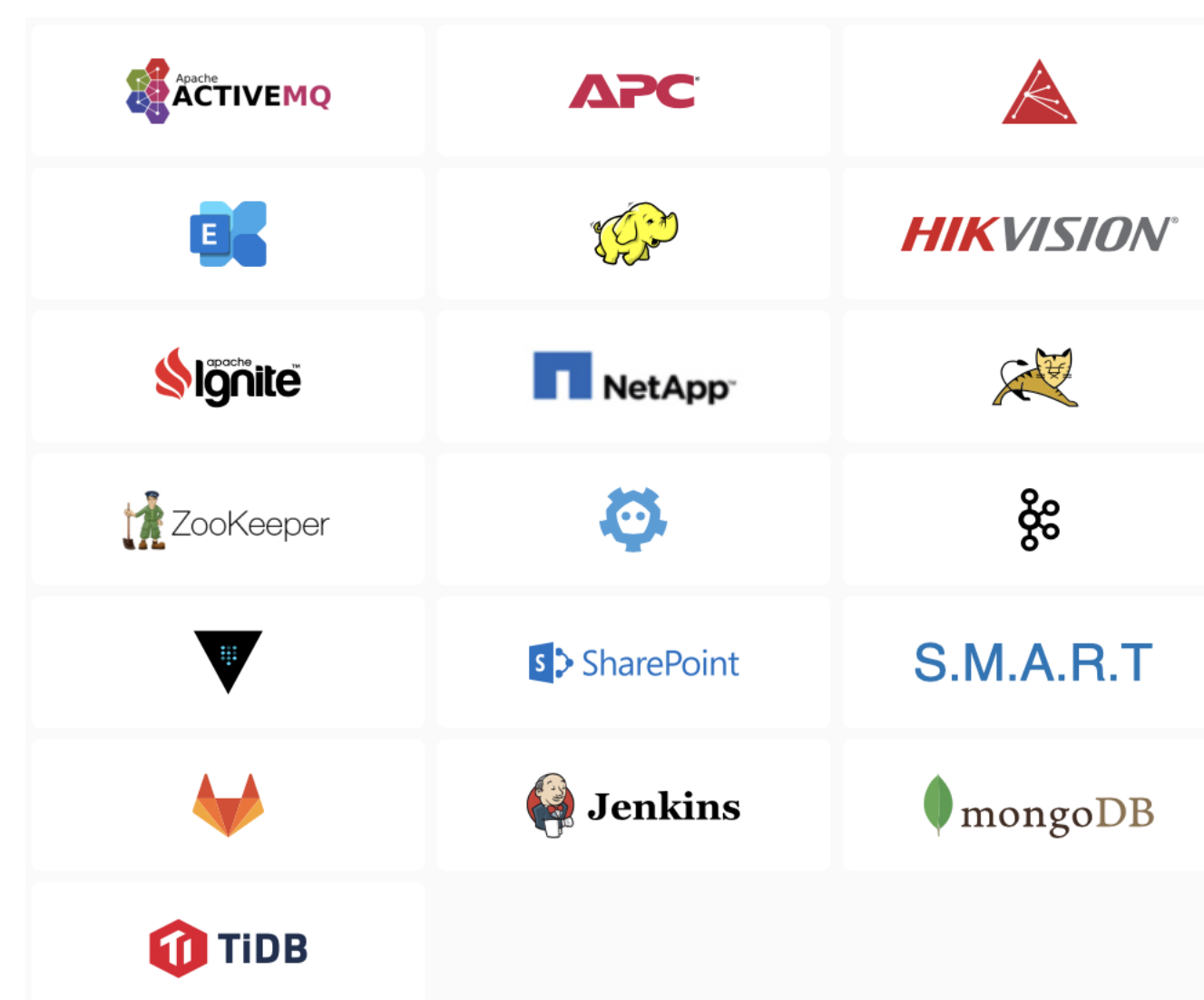
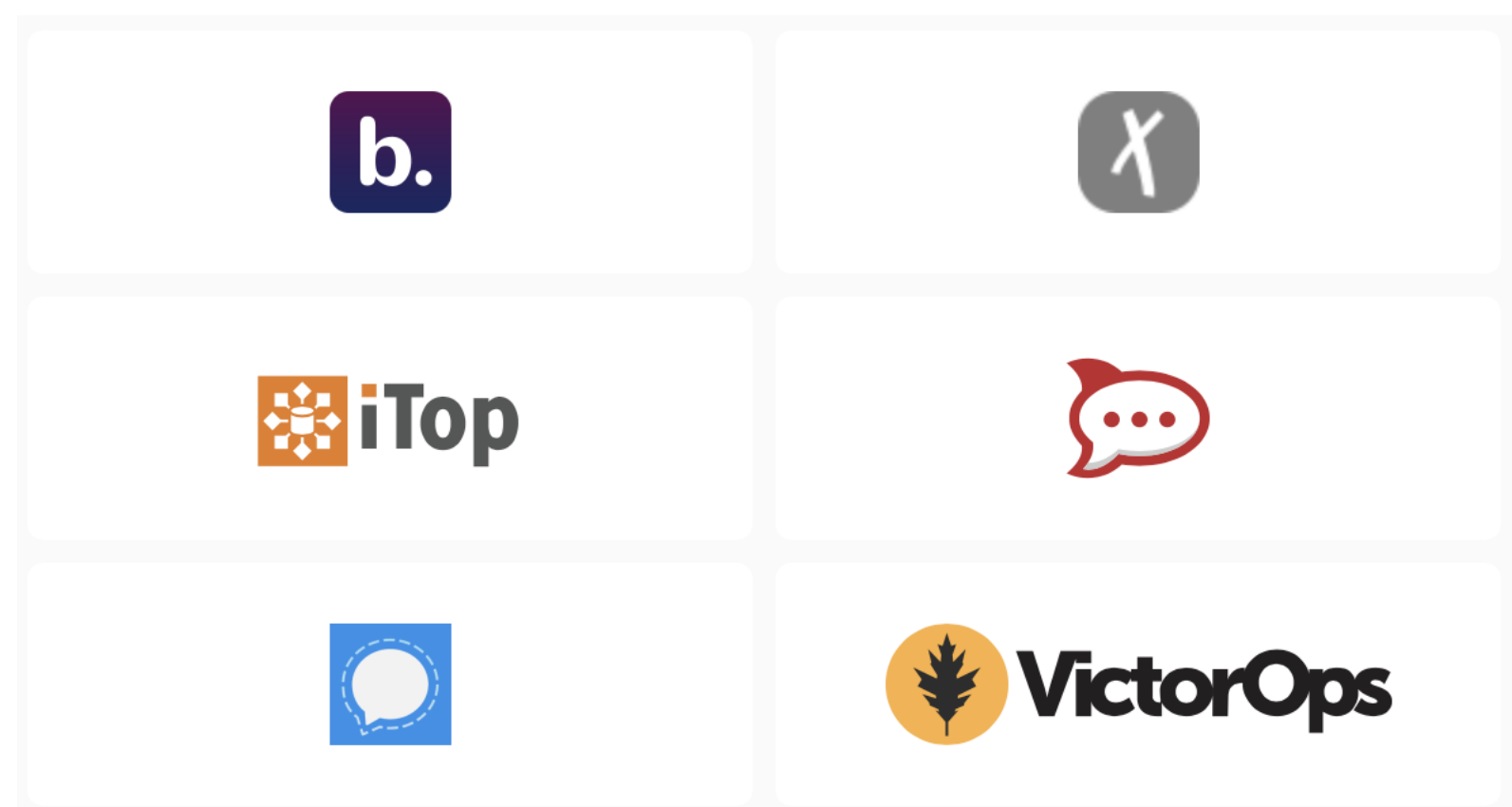
✔ Also

- ✔ Support of VMWare cluster monitoring
- ✔ Support of filtering by the presence of LLD macro for low-level discovery
- ✔ Support of macro {ITEM.VALUE_TYPE} for notifications
- ✔ Support of service name lookup for Oracle for HA setups
- ✔ Support of NTLM authentication for JavaScript Webhooks
- ✔ Support of multiple JMX metrics having same key on one host
- ✔ Increased size of memory available to JavaScript Webhooks and preprocessing
- ✔ CurlHttpRequest renamed to HttpRequest in Webhooks
- ✔ "Alias" renamed to "Username" in user configuration
- ✔ American English is a default language of Zabbix UI and also Zabbix documentation

























































































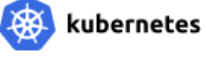































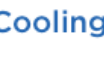











NEW INTEGRATIONS AND TEMPLATES

- ✓ Integrations with iTOP, VictorOps, Rocket.Chat, Signal, Express.ms, and other solutions
- ✓ New templates for monitoring of APC UPS hardware, Hikvision cameras, etcd, Hadoop, Zookeeper, Kafka, AMQ, HashiCorp Vault, MS Sharepoint, MS Exchange, smartctl, Gitlab, Jenkins, Apache Ignite, and more applications and services



OFFICIAL SOLUTIONS FOR MONITORING AND ALERTING

 .NET	 1C: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

<https://www.zabbix.com/integrations>

TEMPLATES FOR HARDWARE VENDOR DEVICES

ZABBIX

PRODUCTSOLUTIONSSUPPORT & SERVICESTRAININGPARTNERSCOMMUNITYABOUT US

DOWNLOAD

Zabbix 5.4 is out!

BlogDocumentationEnglishCustomer Login

Monitoring and Integration Solutions

APC

APC



APC

Manufacturer of power supply products designed to use with various electrical appliances. The company`s power supply products are used in personal computers, engineering work stations, file servers, communications and inter networking equipment, enabling customers to get reliable power and physical IT infrastructure.

Available solutions

Official Templates	3rd Party Solutions
APC UPS GALAXY:	APC UPS Galaxy 3500 SNMP
APC SMART-UPS:	APC Smart-UPS 2200 RM SNMP APC Smart-UPS 3000 XLM SNMP APC Smart-UPS RT 1000 RM XL SNMP APC Smart-UPS RT 1000 XL SNMP APC Smart-UPS SRT 5000 SNMP APC Smart-UPS SRT 8000 SNMP
APC UPS SYMMETRA:	APC UPS Symmetra LX SNMP APC UPS Symmetra RM SNMP APC UPS Symmetra RX SNMP
GENERAL TEMPLATE:	APC UPS SNMP

DEPLOY **ON-PREMISE**



DEPLOY IN THE **CLOUD**



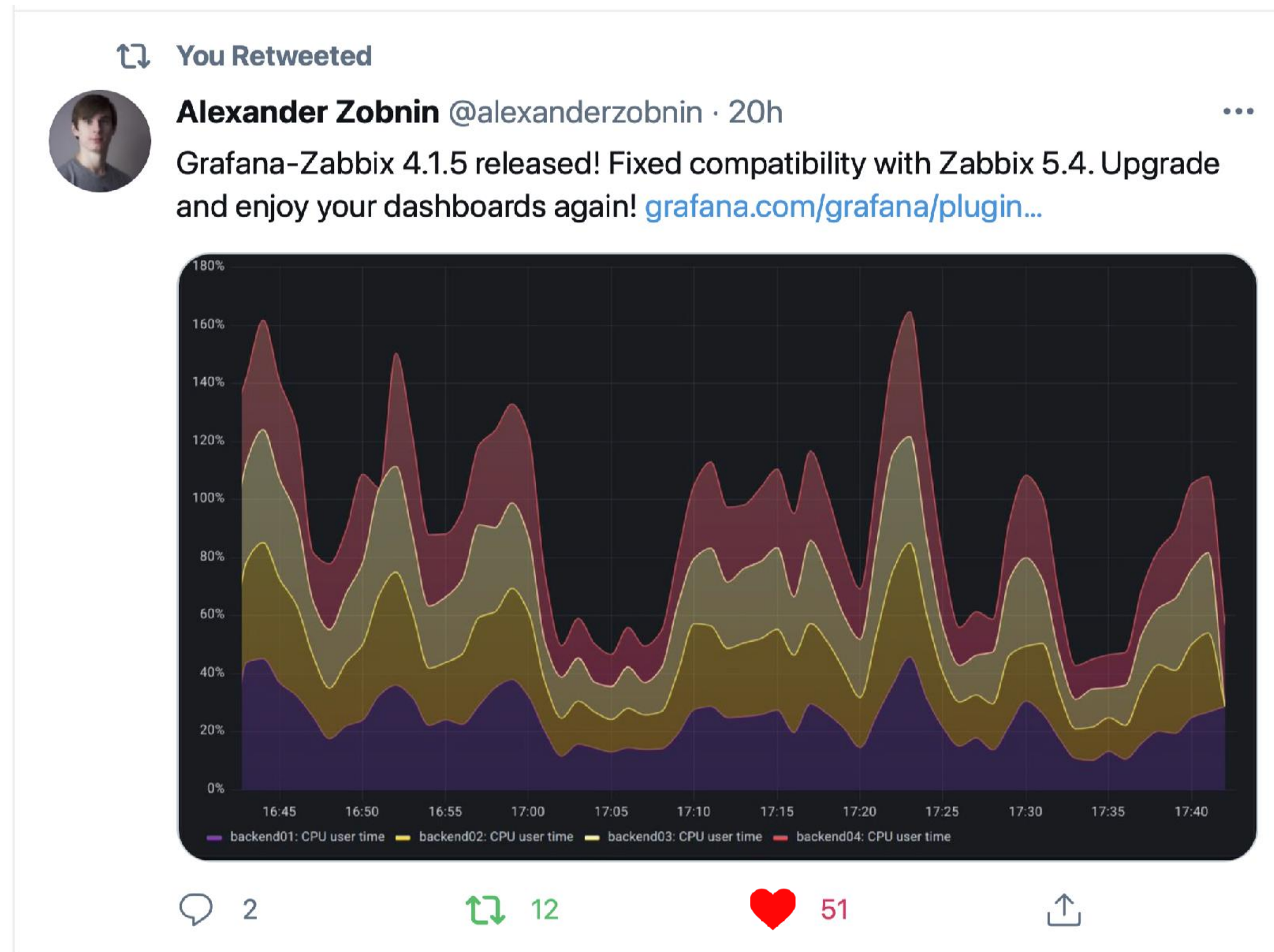
BREAKING CHANGES

- ✓ No support of applications and screens
 - ✓ Many API methods are affected
- ✓ No support of global value maps
- ✓ New syntax for trigger expressions and calculated metrics
 - ✓ Aggregate metrics are merged into calculated metrics



INTEGRATION WITH GRAFANA

- ✓ Broken at release day due to API changes
- ✓ Quickly fixed by Alexander, thank you!



UPGRADE NOTES

- ✓ Install new binaries for Zabbix Server and Proxies, upgrade Zabbix UI
 - ✓ Zabbix Server **will upgrade your database automatically**
- ✓ All trigger expressions, calculated and aggregate metrics **will be automatically converted**
- ✓ Applications will **be automatically converted** to tags
 - ✓ For example: “CPU” will be converted to tag “Application:CPU”
- ✓ Global values maps will be moved to templates and host level
- ✓ Screens **will be automatically converted** to Dashboards



6.0 LTS

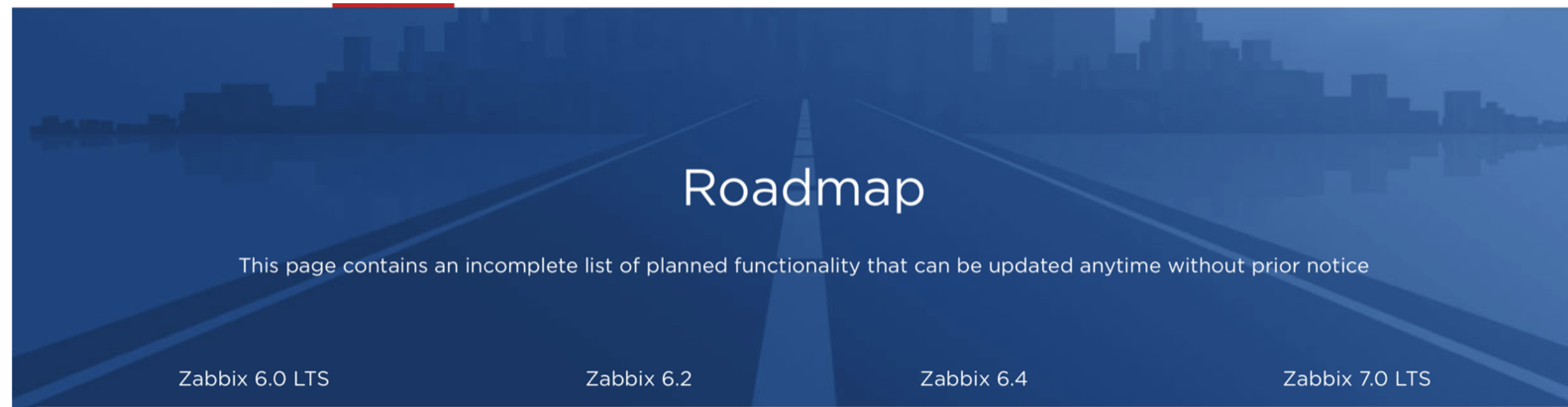
ETA: 2021, Q4

Work in progress:

HA for Zabbix Server

Business Service Monitoring (BSM)

ZABBIX ROADMAP: LONG TERM & UP-TO-DATE



Zabbix 6.0 LTS
Planned release date: Q4 2021

Event correlation and enterprise alarm console

- Ability to perform event filtering, de-duplication and aggregation using event preprocessing rules
- Ability to manually hide and suspend problems for a period of time
- Problem view optimised for faster problem resolution and collaborative work

Business service monitoring (BSM)

- Make Zabbix scale to 100K of business services **In dev** **New**
- Support of alerting on service status changes **In design** **New**
- Tag based mapping between problem events and services **In dev** **New**
- Support of complex service status calculation and propagation rules **In design**
- Support of multi-tenancy for Services **In dev** **New**
ZBXNEXT-59 ★ Top voted!
- New widgets for service tree and SLA reporting **In design**
- Root cause analysis **New**
- Impact analysis **New**
- Import/export for service tree **In design** **New**
- New graphical visualization of service tree **New**

<https://www.zabbix.com/roadmap>



ZABBIX 5.4

Thank you!

