



ZABBIX is an open source enterprise-level monitoring solution designed to monitor millions of metrics in real time, collected from tens of thousands of servers, virtual machines, network devices and applications





T··Systems·







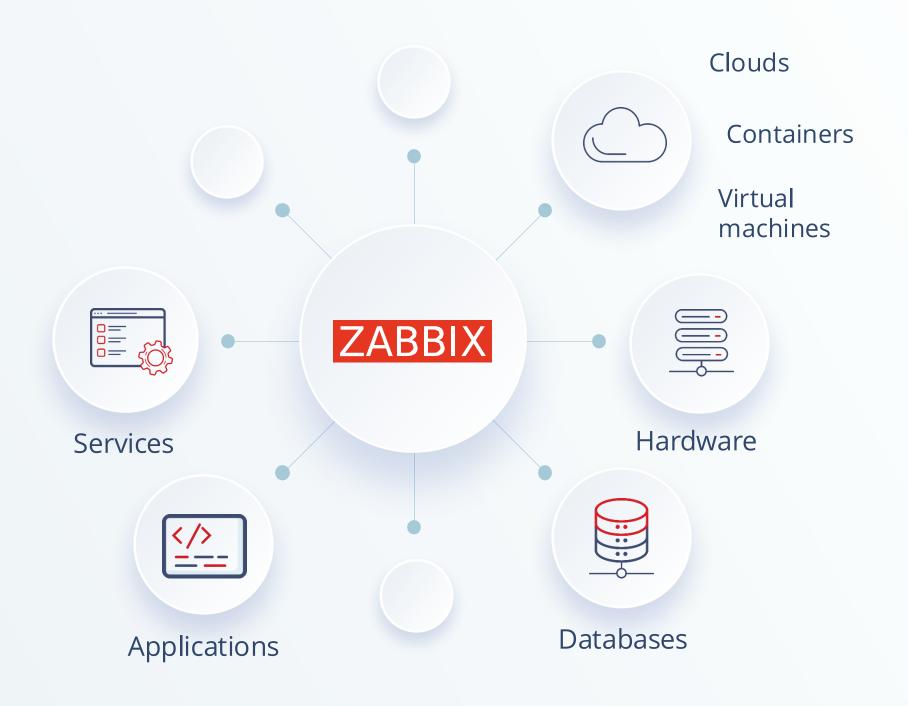
- Over 300 000+ installation worldwide.
- ZABBIX is trusted by customers all over the globe.

WHAT TO MONITOR?



Solutions for different industries, application areas and use cases

- Access control: Monitor changes in room temperature, use of access cards and other sensors and logs.
- **KPI monitoring:** Use collected metrics to create dashboards for your business KPI monitoring: number of web visitors, number of purchases, amount of devices manufactured per hour, etc.
- Capacity monitoring: Monitor your infrastructure resource utilization and let Zabbix help you plan your IT budget accordingly.
- **Configuration monitoring:** Use Zabbix to enable monitoring of software versions, keep track of installed applications and updates
- Inventory monitoring: Utilize Zabbix to manage the inventory of your devices hardware, software serial numbers and much more!
- **Security monitoring:** Monitor security risks by monitoring network ports, malicious software, password files and other security entities.



BASIC ARCHITECTURE



ZABBIX SERVER BACKEND

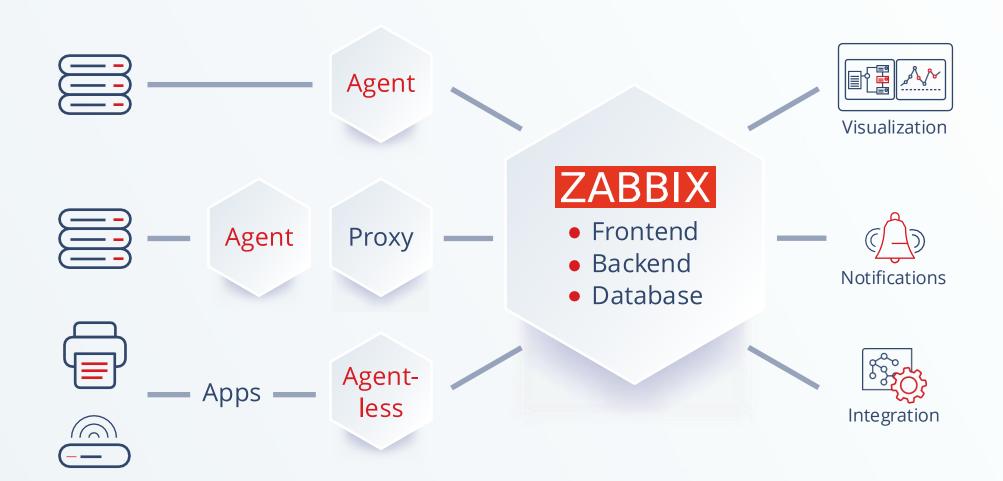
- Core process responsible for data collection and analysis
- Can be deployed on Linux, BSD, Raspbian and other Unix-like operating systems
- ▼ Native Zabbix server high availability cluster

DATABASE

- Data and configuration storage
 PostgreSQL + TimescaleDB
- MySQL and Community forks
- Oracle

FRONTEND

PHP frontend for configuration management and data visualization.



High Availability



- Server can be made HA (Active/Standby)
- Database can be made HA (outside of Zabbix product scope)
- Proxy can be made HA via Proxy groups

System information						
Name	Address	Last access	Status			
ha2	192.168.0.109:10051	0	Active			
ha3	192.168.0.111:10051	7s	Stopped			
ha1	192.168.0.105:10051	3s	Standby			
Fail-over delay: 1 minute						

Name ▲	State	Failover period	Online proxies	Minimum proxies	Proxies
Belgium	Online	1m	7	3	7 Antwerp, Brussels, Charleroi, Dikkebus, Eupen, Ghent, Tournai
Luxemburg	Online	1m	2	1	2 Luxembourg, Troisvierges
Netherlands	Online	1m	11	7	Amsterdam, Den Haag, Eindhoven, Haarlem, Harderwijk, Maaskantje, Maastricht, Rotterdam, Utrecht, Zaanstad, Zierikzee

DISTRIBUTED MONITORING



Deploy Zabbix proxies in remote sites for added redundancy and ease of configuration

- Select the direction of communication between Zabbix server and Zabbix proxies Zabbix
- Zabbix supports unlimited number of proxies
- Scale up your monitoring by adding extra Zabbix proxies to your environment



DISTRIBUTED MONITORING

Collect data from thousands of monitored devices:

- Data compression
- Monitor behind the firewall, DMZ
- Collect data even in case of network issues
- Remotely run custom scripts on monitored hosts
- Control all Zabbix proxies from a single pane of glass

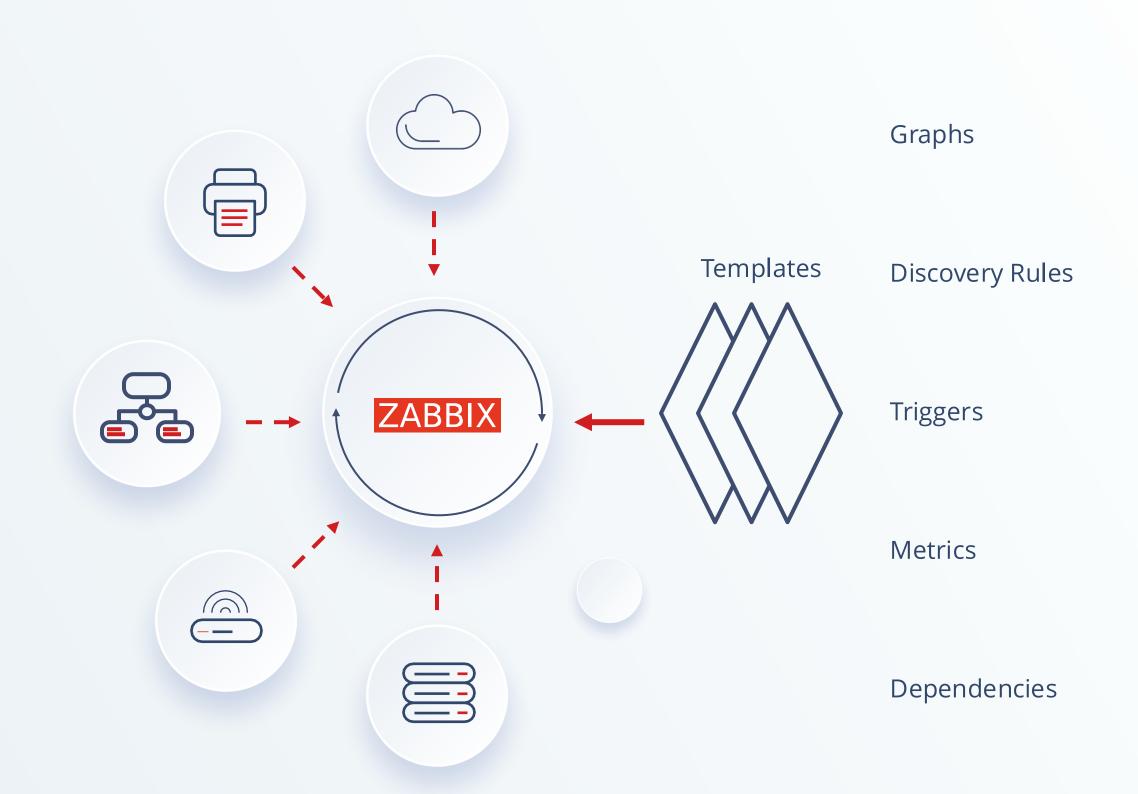


EFFORTLESS DEPLOYMENT



Save your time:

- ✓ Install Zabbix in minutes
- Use out-of-the-box templates for most of the popular platforms
- Automatically discover and create your hosts in Zabbix
- Deploy any Zabbix component by using packages, docker containers, cloud images or compile it from the source code.
- Receive Zabbix alerts by using out-ofthe box media type integrations

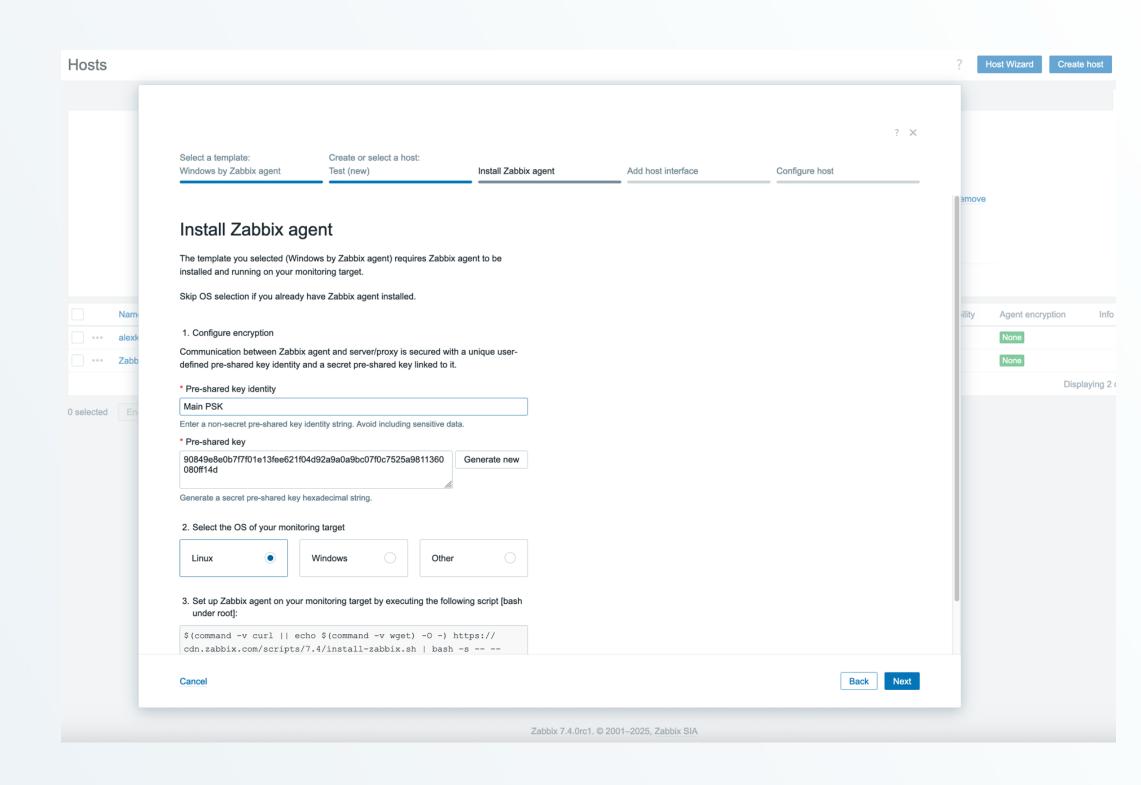


EFFORTLESS DEPLOYMENT



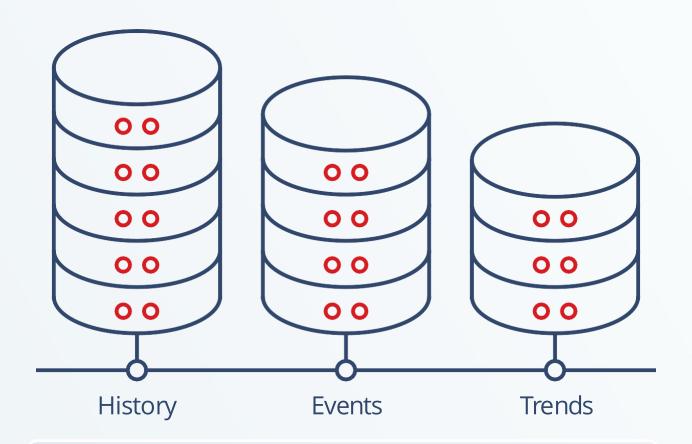
Save your time:

- Get a wizard, guiding you
- Configure all settings
 - Select the correct host interface, or
- interfaces
- Install your Zabbix agent with ease on
- both Windows and Linux via a powershell or bash script, provided by Zabbix!
 - Add a new host in a very straight
- forward, user friendly way!



STAY IN CONTROL OF YOUR DATA

- All of the collected metrics, problem history, trends remain in your control
- In addition to collecting history, Zabbix provides the ability to store hourly trend data min, max, avg and count of collected values per hour.
- Define flexible data storage periods for History, Trends, Events and other data
- None of the data or telemetry gets transferred to Zabbix or any other 3rd party



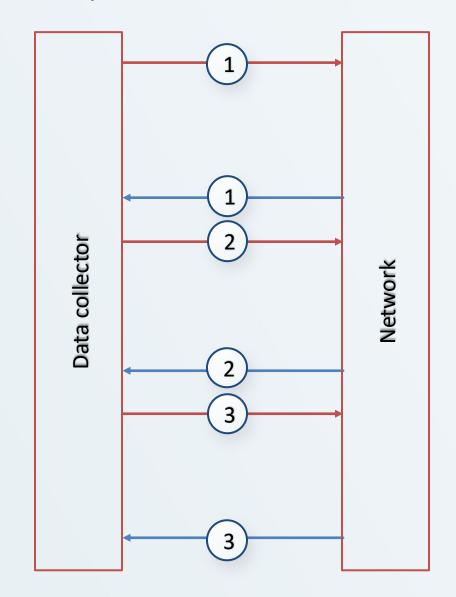
Example: Store 1 year of history, 6 months for events, 2 years for trends.



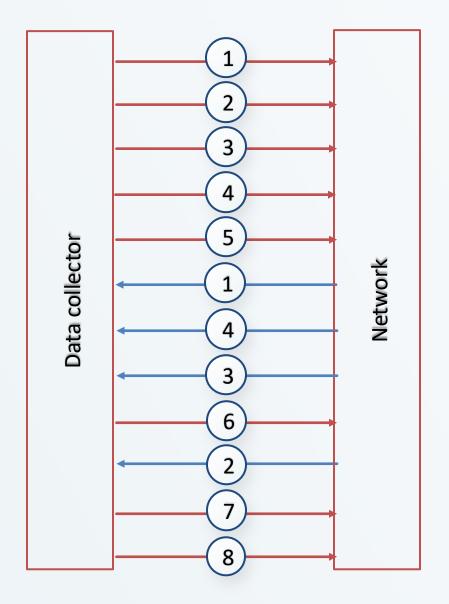
DATA COLLECTION: ASYNCHRONOUS DATA

POLLING

Synchronous data collection



Asynchronous data collection



DATA COLLECTION: AGENTLESS

- Simple ping and port checks
- SNMP(v1, v2c, v3), HTTP, IPMI and SSH checks
- Database monitoring via ODBC
- Java applications monitoring
- Web APIs and HTTP endpoints
- Custom metrics/scripts
- Aggregations and calculated checks
- VMware monitoring
- Web monitoring
- Synthetic monitoring



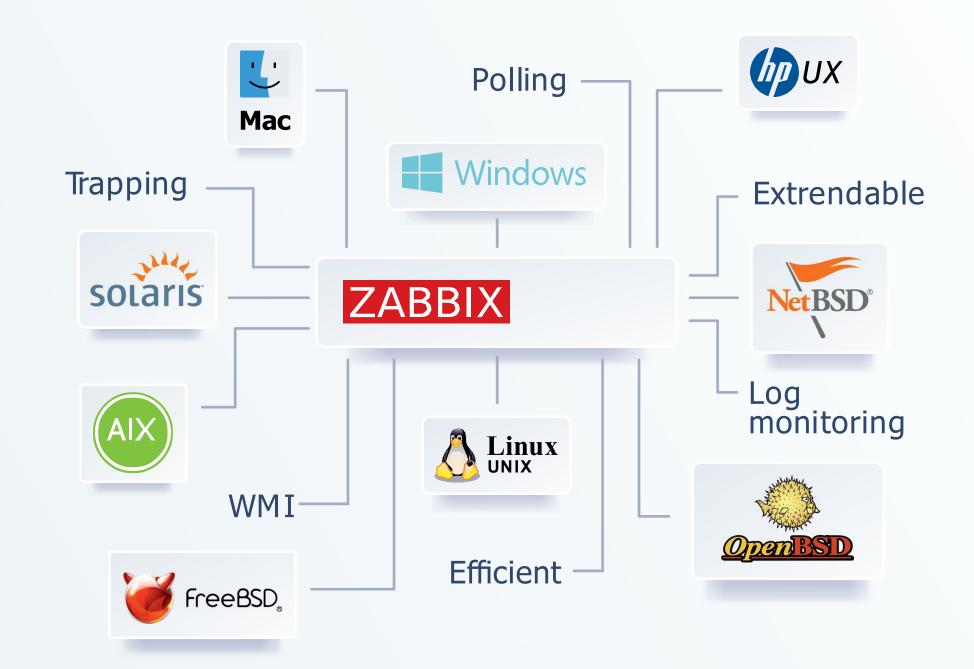


DATA COLLECTION: ZABBIX AGENT

Zabbix Agent can be deployed on any Unix-like or Windows platforms and collect metrics from any device or application.

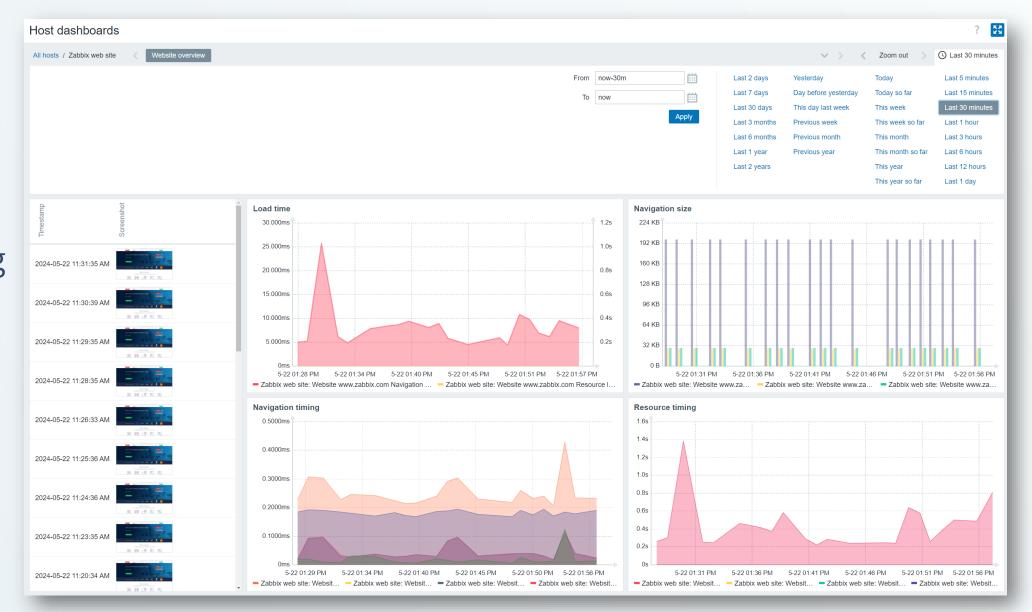
COLLECT DATA FROM THOUSANDS OF MONITORED DEVICES:

- Collect OS level performance and availability metrics
- Supports polling and sending traps
- Provides native log monitoring
- Create your own custom metrics



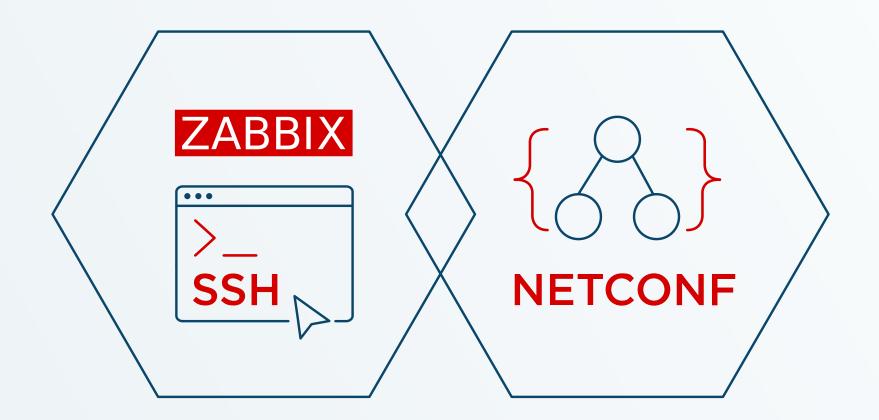
DATA COLLECTION: WEB MONITORING

- Items for website navigation and resource statictics
- Current website screenshot
- Triggers for slow load times
- Triggers for website availability
- Dashboard displaying statistics
- Screenshots, for troubleshooting



DATA COLLECTION: NETCONF SUPPORT

- Based on SSH so secure by default
- Successor of SNMP
- New templates being built
- Extremely fast / performant
- Allows Master/Dependent items
- ✓ Works from Zabbix 7.2





DATA COLLECTION: PREPROCESSING

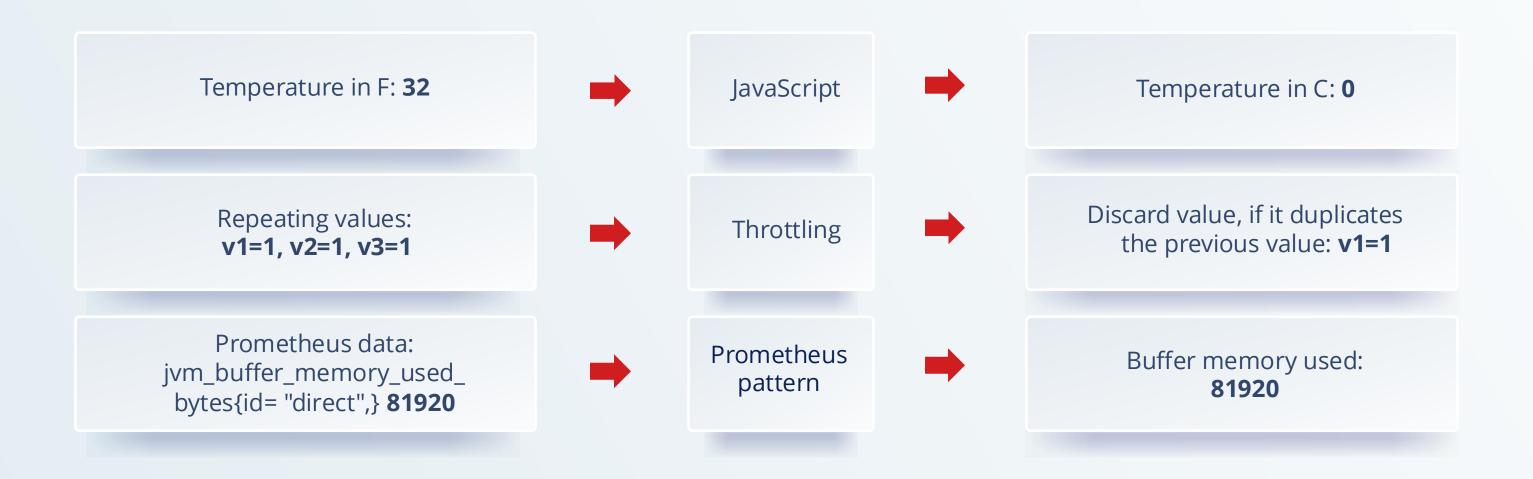
Zabbix offers a variety of approaches to transform the data before storing it in the database





DATA COLLECTION: PREPROCESSING

Zabbix offers a variety of approaches to transform the data before storing it in the database

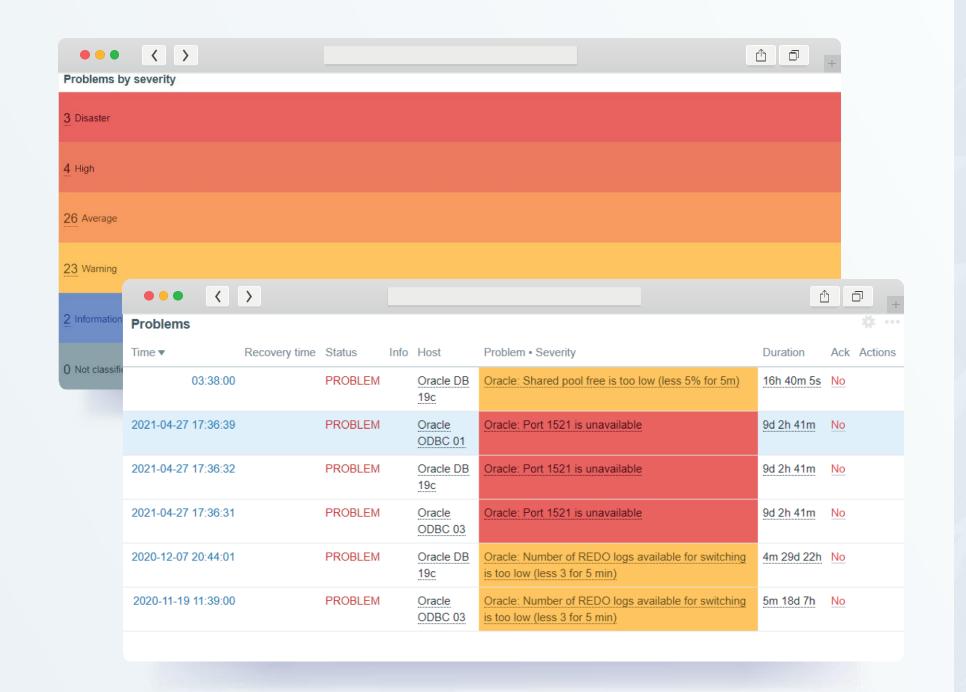


PROBLEM DETECTION



Detect problems from the incoming data flow automatically

- Flexible problem definitions
- Multiple problem severity levels
- Correlation/root cause analysis
- Anomaly detection
- Baseline monitoring
- Data trend analysis



PROBLEM DETECTION



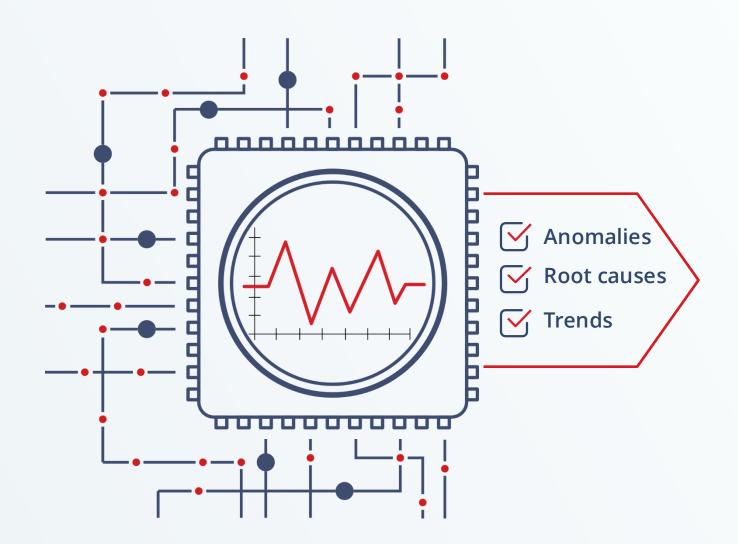
Use trend prediction to react proactively and prevent the impact of the problem.

What is the value of the data item after a certain time?

Example: how much free space will there be on the server in a week's time?

When will the value of the data item approach the threshold?

Example: when will the server reach less than 1GB of free space?

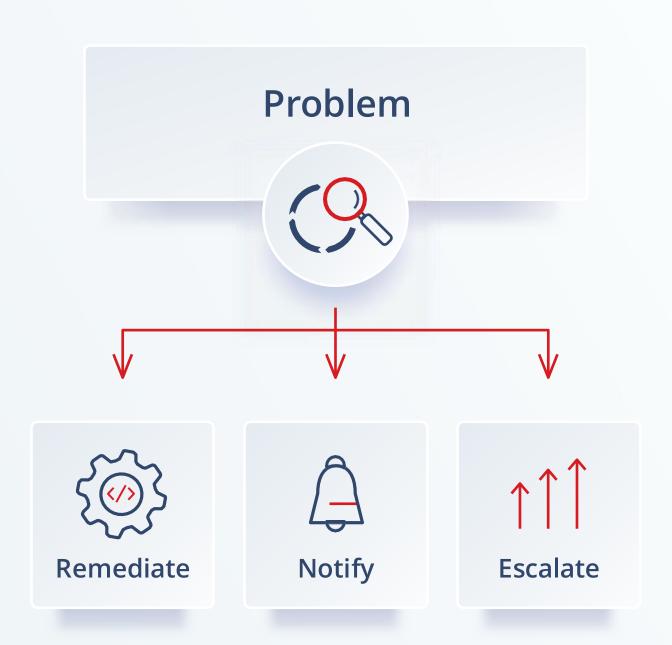


ALERTING & NOTIFICATIONS



Get notified in case of any issues using different channels:

- Send messages via E-mail, SMS, Webhooks
- Remediate issues automatically by executing commands/scripts on agent or core server
- Escalate problems according to flexible userdefined Service Levels
- Customize messages based on recipient's role
- Customize messages with runtime and inventory information



ITSM AND MESSAGING SYSTEM

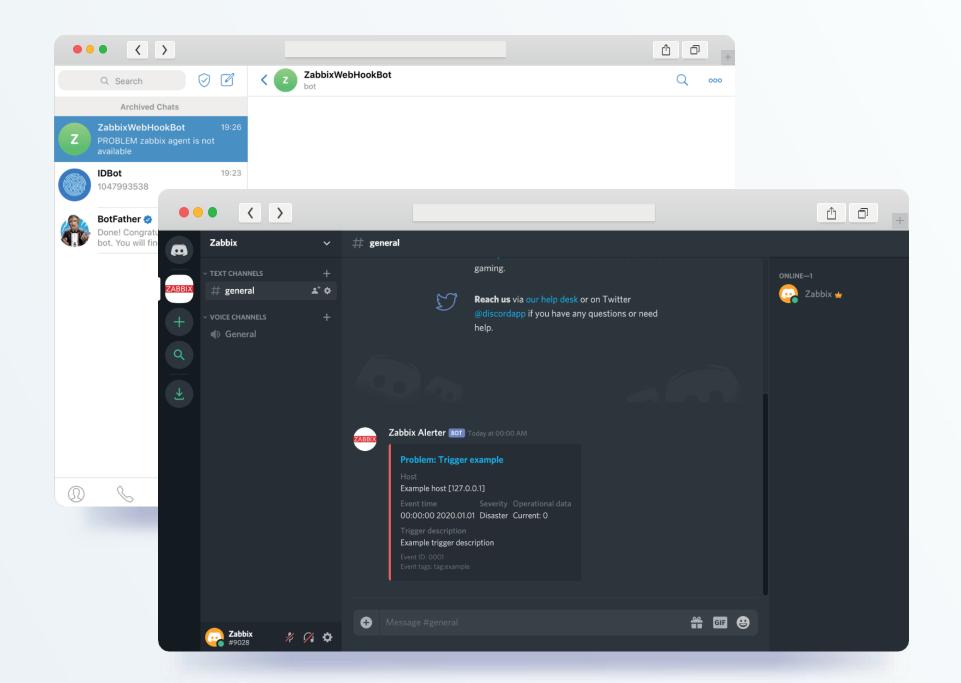
INTEGRATIONS

- JavaScript webhooks are open for customization and sharing
- Vast selection of official integrations with the option to import custom community integrations
- Out of the box integrations for solutions such as Jira ServiceDesk, Slack, Opsgenie and many more.







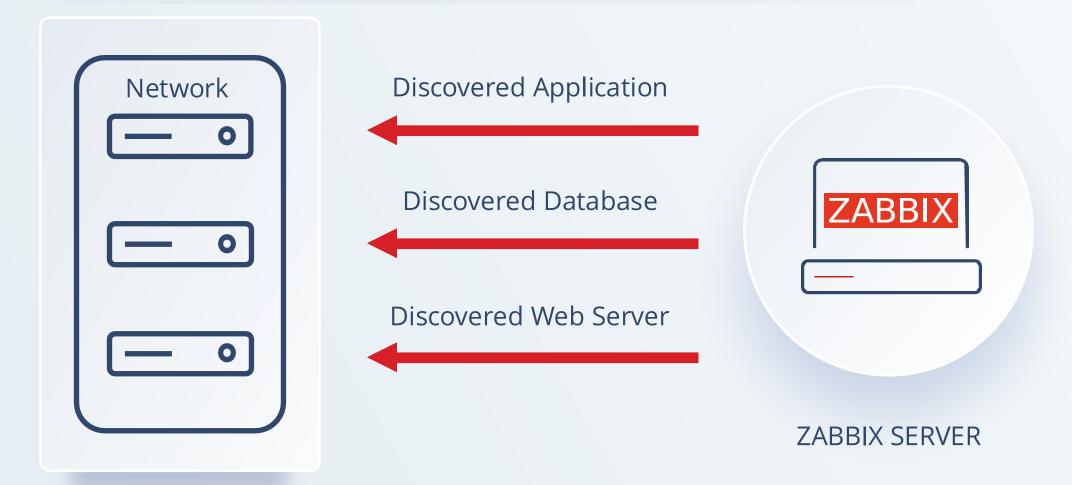


HOST DISCOVERY



NETWORK DISCOVERY:

periodically scans the network to detect changes and performs user specified actions.



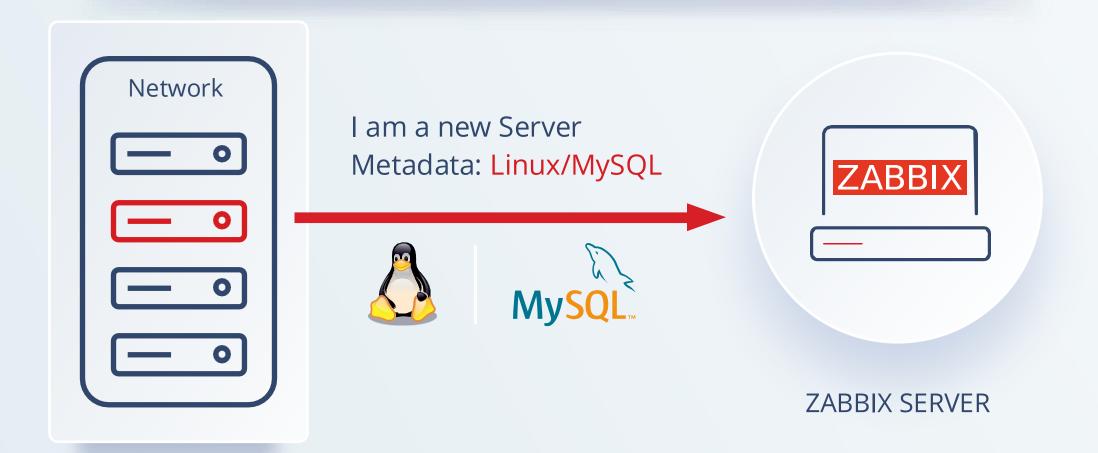
Scan network for new hosts

- Create a new host in Zabbix
- Assign host to a host group
- Assign the corresponding templates
- Notify a user
- Execute a script



AGENT AUTO-REGISTRATION:

configure automated monitoring of new equipment with Zabbix agents installed. Newly deployed agents will send their metadata to the Zabbix server and an autoregistration request will be received.



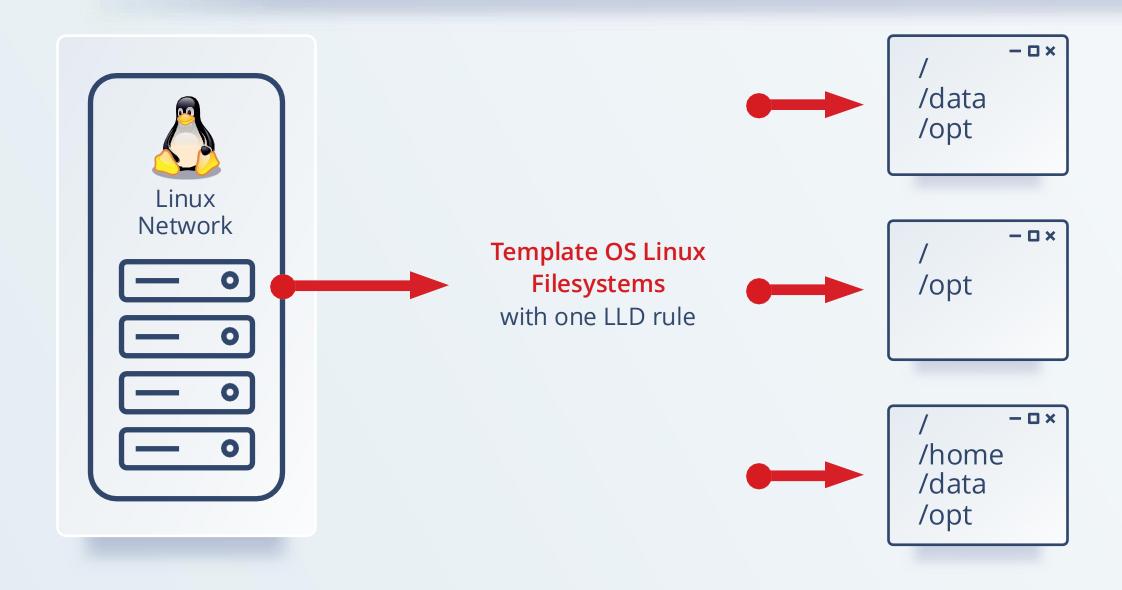
Automate host creation - example

- New MySQL hosts created and linked to Linux/MySQL templates
- Assign a host to the DB server host group
- Notify the DB admin
- Execute an onboarding script on the host

LOW LEVEL DISCOVERY

ZABBIX

Let Zabbix automatically create items, triggers and graphs on your hosts, depending on the host entities



Discover, monitor and alert on Filesystem partitions per host

DATA VISUALIZATION



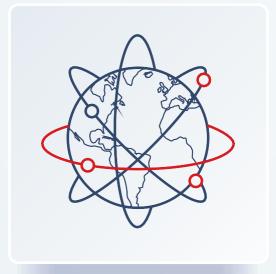
Present your IT environment on Web interface using:



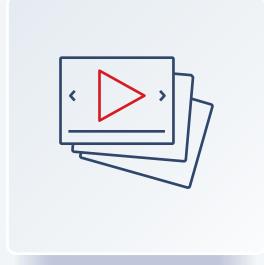
Widget-based dashboards



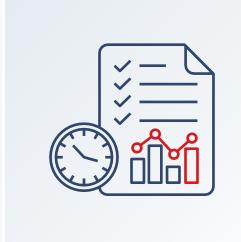
Graphs



Network maps



Slideshows



Scheduled reports

VISUALIZATION: DASHBOARDS



Zabbix Dashboard is a central place in the web frontend that provides personalized details about the monitored environment:

- Top or bottom hosts sorted by metric
- Item values
- Network and geographical maps
- Graphs
- Problem lists
- Host status
- SLA reports

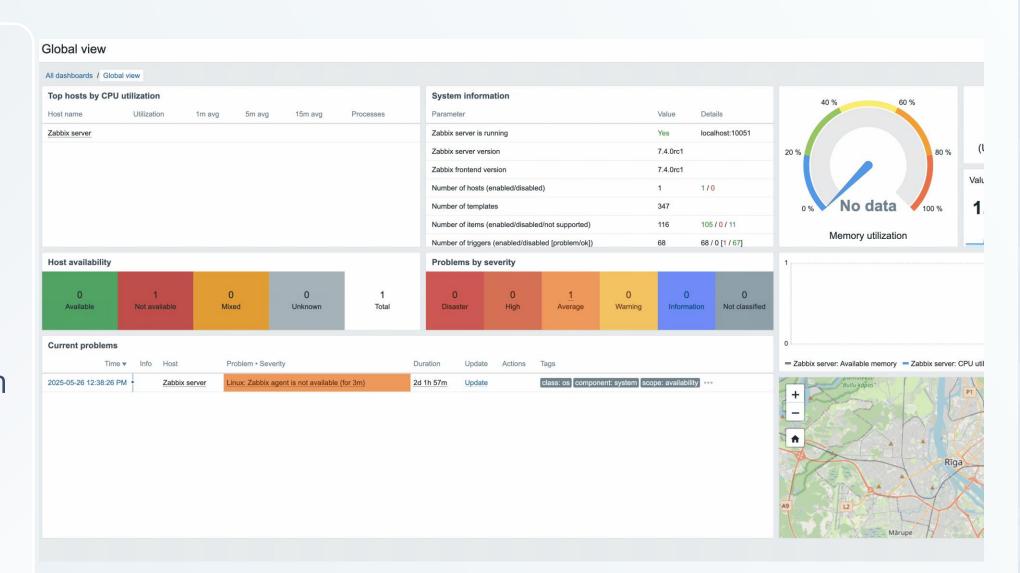


VISUALIZATION: DASHBOARDS



Zabbix Dashboard and with the introduction of WYSIWYG for editing, configuration gets a lot faster:

- You change the configuration of a widget
- Without closing the editor
- Immediate updates
- Immediate changes
- Speeding up your configuration
- Easier to create dashboards



VISUALIZATION: DASHBOARD WIDGETS

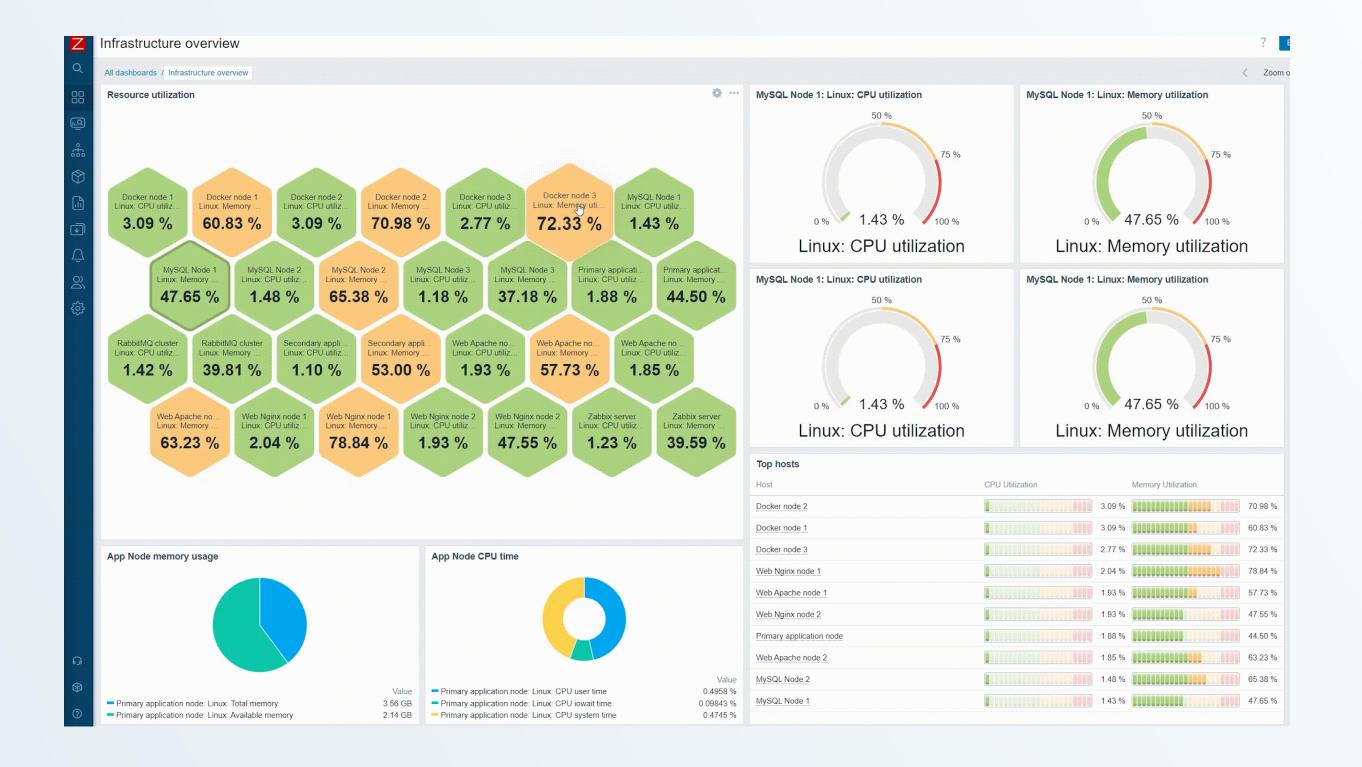
Many flexible widgets out of the box available!



VISUALIZATION: DYNAMIC WIDGETS

ZABBIX

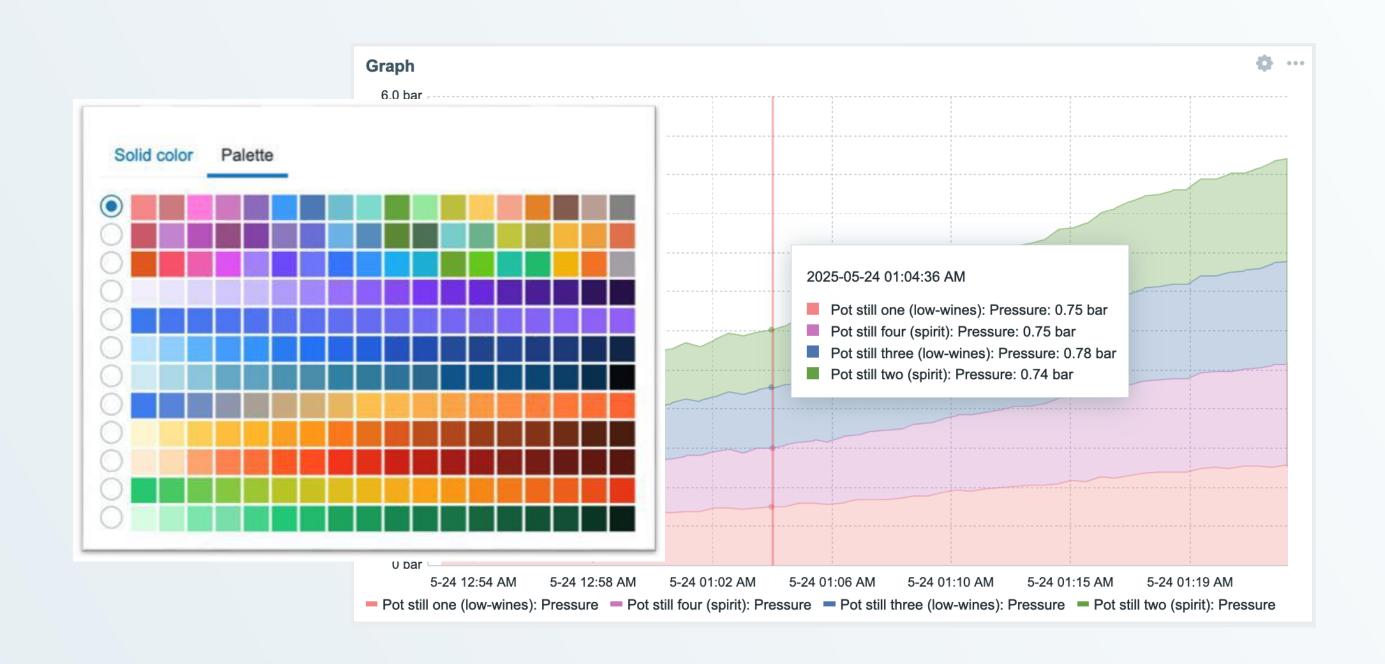
A communication framework is available enabling communication between widgets



VISUALIZATION: Color palettes

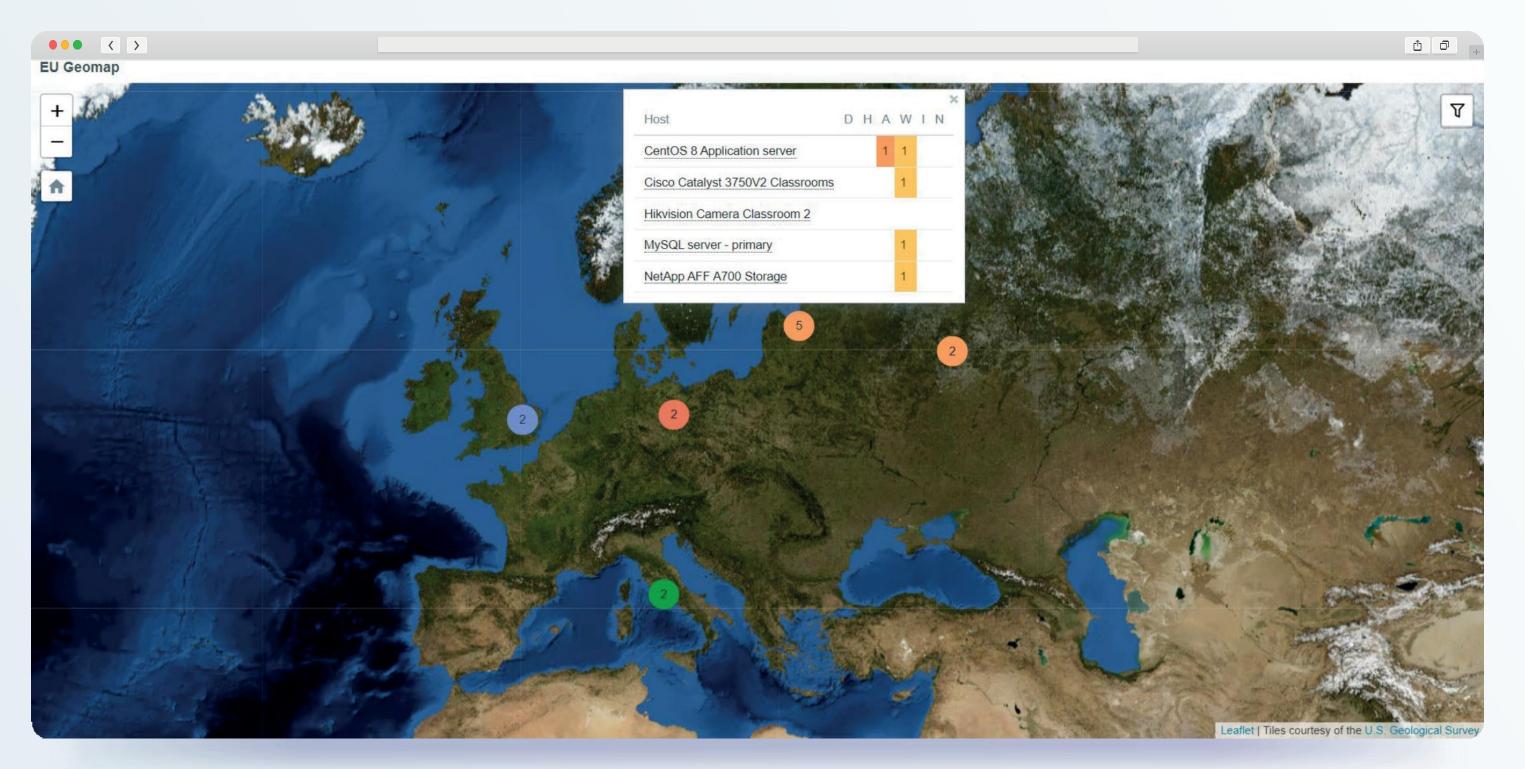
ZABBIX

No more "ugly" widgets, but appealing colors!



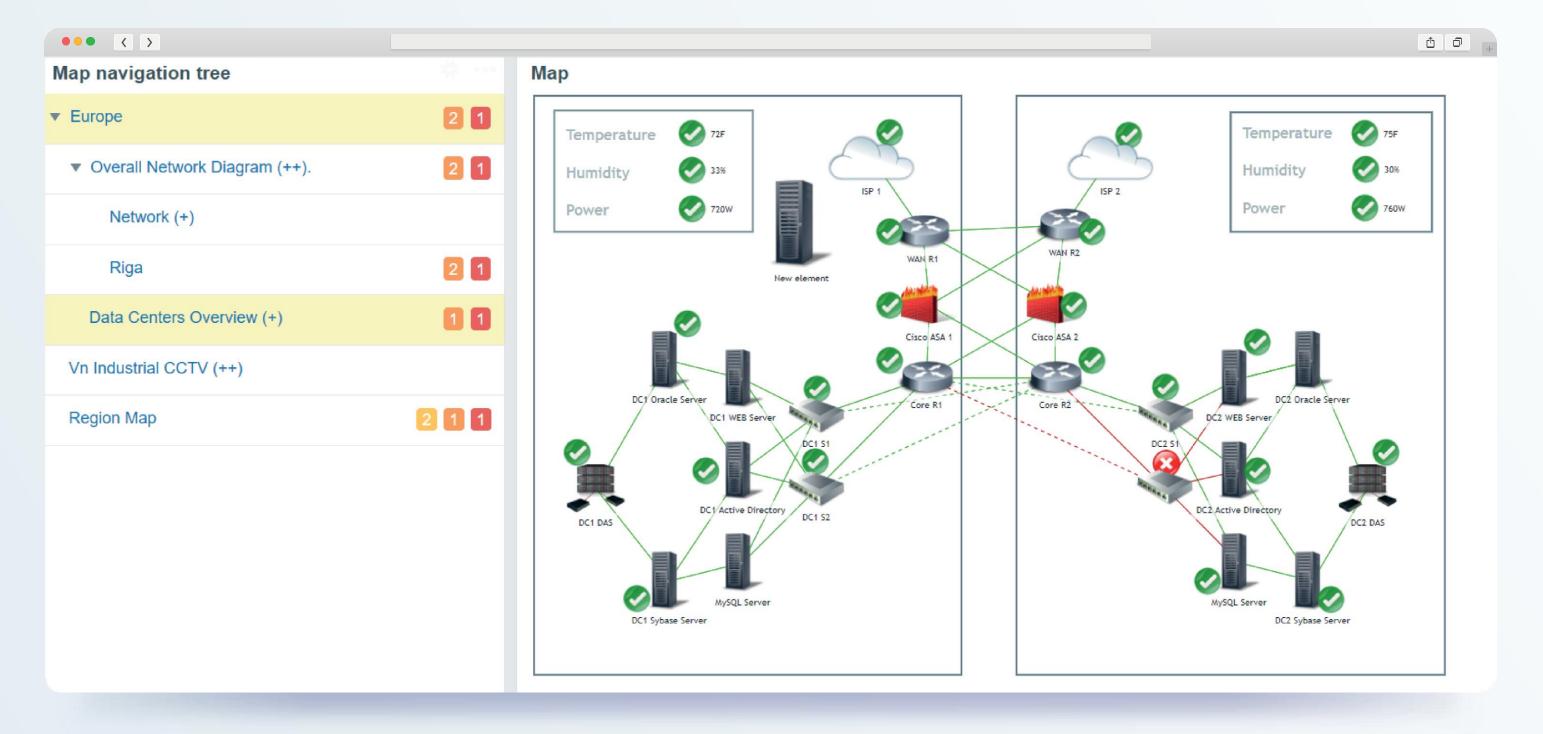
VISUALIZATION: GEOMAPS

Zabbix geomaps enable Zabbix administrators to view the state of their infrastructure displayed on a geographical map.



VISUALIZATION: NETWORK MAPS

Create an interactive overview of your environment on multiple levels by using nested maps. Zabbix maps are capable of displaying real-time status and values received by your monitored entities.



VISUALIZATION: REPORTS



Schedule an e-mail report based on any of your existing dashboards

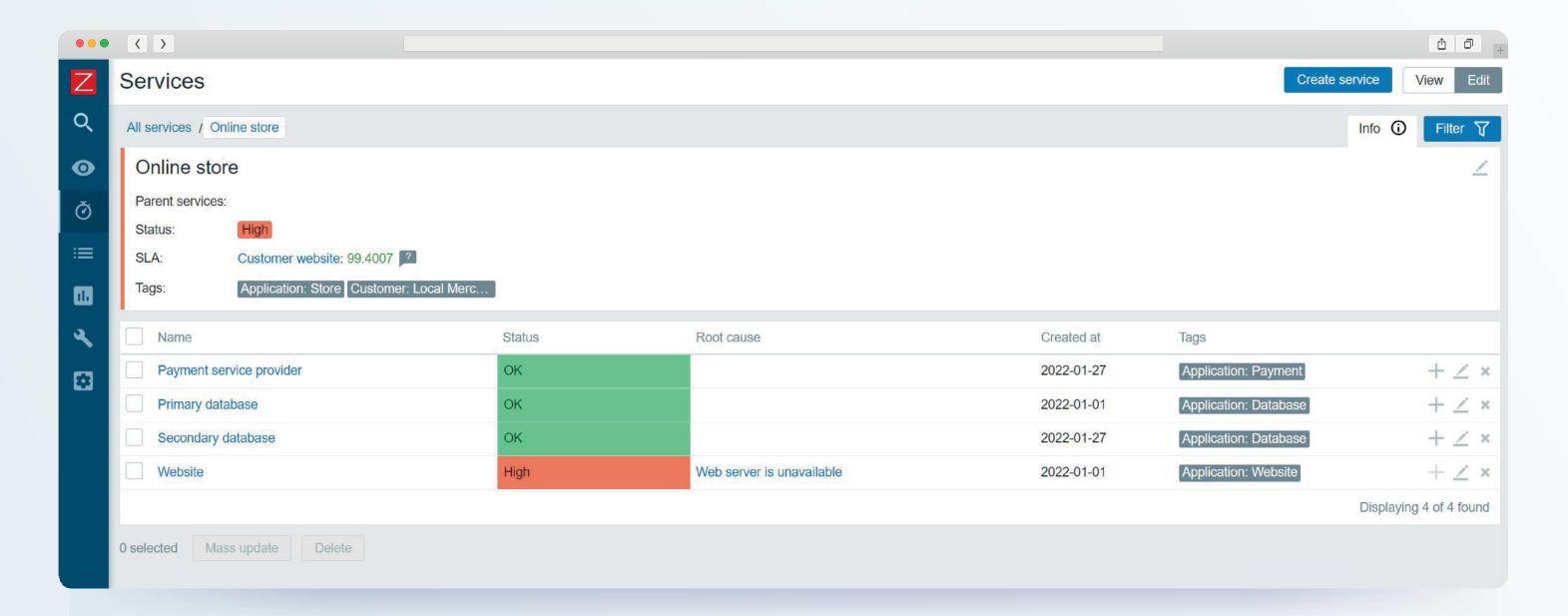
- Daily/Weekly/Monthly/Yearly reports
- Select the period for which the data should be provided in the report previous D/Week/Month/Year
- Send reports to individual users or members of a user group
- Send reports with either the report recipient or report creator permissions
- Customize report message and subject

				å 5 +
Name ▲	Owner	Repeats	Period	Last sent
Customer "Bank" daily report	Melanie	Daily	Previous day	2023-02-01 09:00
Customer "Bank" management report	Melanie	Monthly	Previous month	2023-02-01 12:00
Customer "MSP" daily report	Lars	Daily	Previous day	2023-02-01 09:00
Customer "MSP" management report	Lars	Monthly	Previous month	2023-02-01 12:00
Daily customer report	Admin (Zabbix Administrator)	Daily	Previous day	2023-02-01 12:00
Weekly customer statistics report	Admin (Zabbix Administrator)	Weekly	Previous week	2023-02-01 12:00

BUSINESS SERVICE MONITORING

ZABBIX

With Zabbix you can monitor your business services and receive alerts about business service status change, receive root cause analysis and monitor business service SLAs.

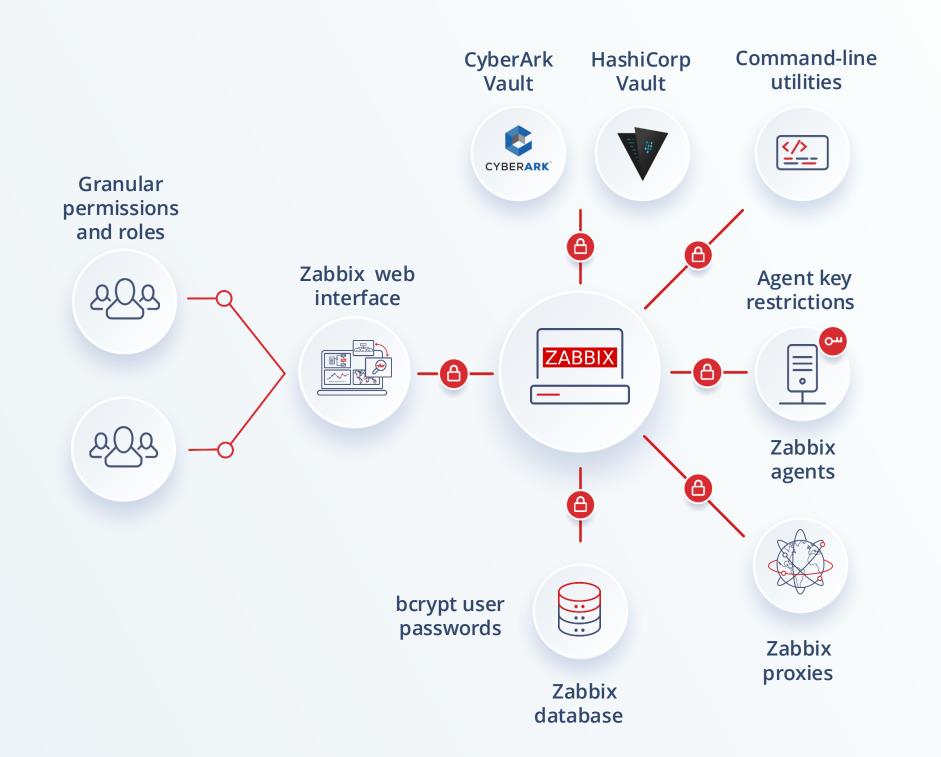


SECURITY



PROTECT YOUR DATA

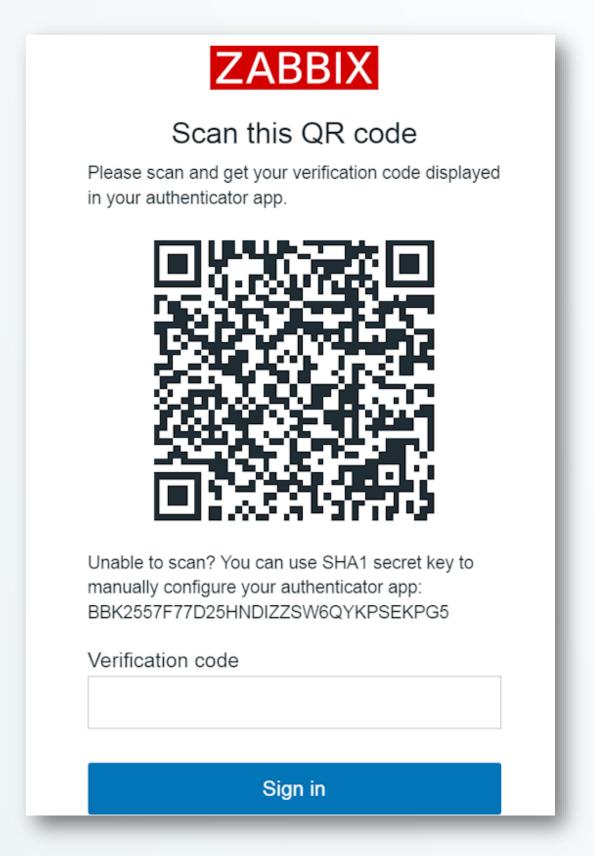
- Strong encryption between all Zabbix components
- PSK and certificate encryption support
- TLS v. 1.2 and 1.3 support
- Option to store all of your sensitive credentials in an external vault
- Multiple authentication methods:Open LDAP, Active Directory
- Flexible user permission and role schema
- Full isolation between user groups and host groups for multi-tenant deployments
- Zabbix code is open for security audits



SECURITY: MULTIFACTOR AUTHENTICATION



Out of the box support of MFA via TOTP or Duo Universal Prompt



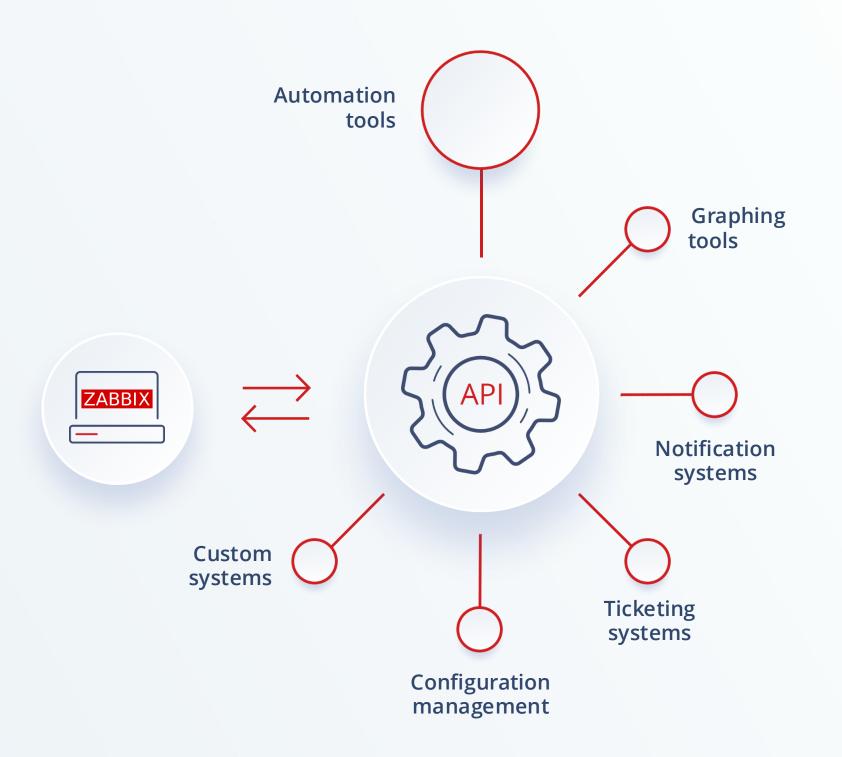
ZABBIX API



Integrate Zabbix with any part of your IT environment

Get access to all Zabbix functionality from external applications through Zabbix API:

- ♥ Uses JSON-RPC 2.0 protocol
- Requests and responses are encoded using JSON format
- Automate Zabbix management via API Integrate Zabbix with third party software:
- Configuration management, ticketing systems
- Retrieve and manage configuration and historical data



BACKED BY PROFESSIONAL SERVICES

Delivered by Zabbix or Zabbix official partners – regardless of time zone or your preferred language.



DOWNLOAD & GET STARTED IN 10 MINUTES

Choose your platform for Zabbix server

- Install and configure Zabbix server
- Configure Zabbix frontend
- Start using Zabbix

