

An open-source monitoring platform that tracks the performance of servers, applications, databases, network devices, and services in real time. It offers alarm management, metric analysis, and centralized monitoring capabilities.

Challenges in Modern Monitoring Systems

The increasing number of servers, applications, databases, and network components in modern IT infrastructures makes end-to-end monitoring of systems difficult. Distributed structures make it harder to centrally manage data coming from different sources. Rising traffic and shifting workloads can make it difficult to detect performance issues and outages in a timely manner. In cases where monitoring tools fall short, operational visibility decreases and response times lengthen. The need for uninterrupted service makes effective alarm management and continuous performance tracking a necessity. Otherwise, service continuity and system stability can be negatively affected.

⚠️ What Problems Does It Solve?

· Lack of visibility in distributed systems

· Late detection of performance issues and outages

· Operational workload created by manual monitoring processes

Core Principles



Visibility

Centralized monitoring of all infrastructure components



Speed

Early detection of issues using real-time metrics



Reliability

Tracking outages and anomalies via continuous monitoring

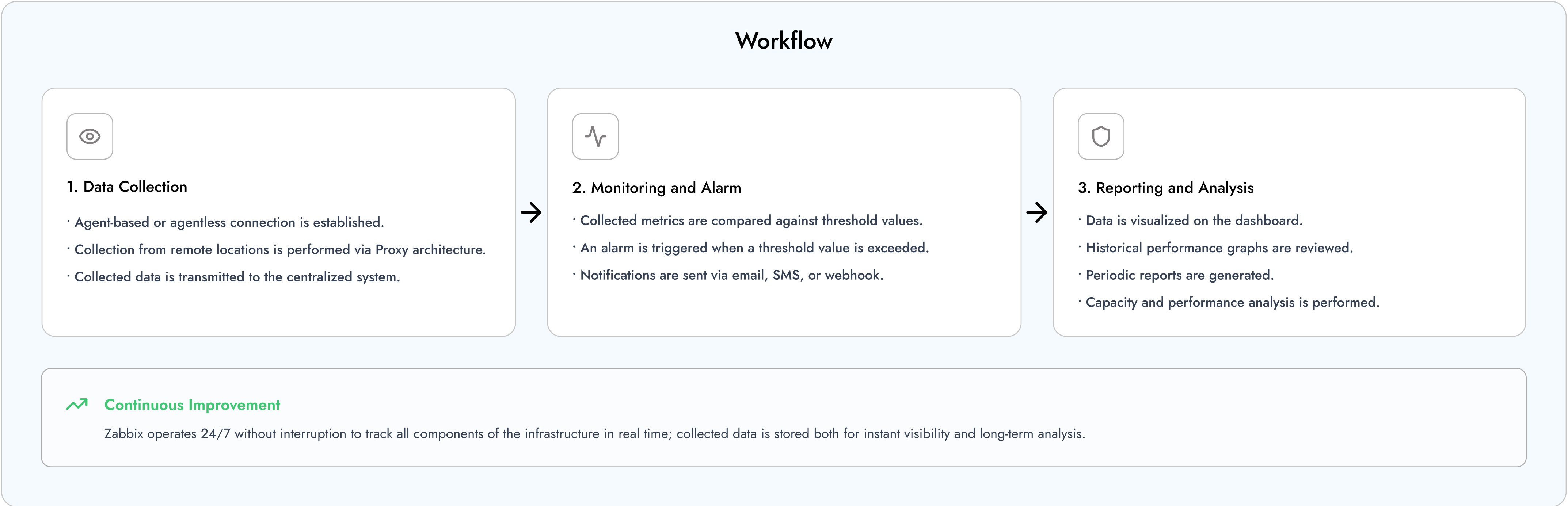


Flexibility

Support for agent-based, agentless, and distributed architecture

How Does Zabbix Work?

Zabbix operates by collecting agent-based or agentless data from components such as servers, network devices, applications, and databases. Collected data is processed on the centralized server and analyzed according to defined thresholds (triggers). When an issue is detected, an event is generated, and actions such as sending notifications or running scripts are deployed accordingly. The entire process ensures centralized monitoring of the infrastructure and rapid detection of problems.



Technical Specifications

 Centralized Monitoring

✔️ Server, network device, application, and database monitoring

✔️ Providing centralized visibility in distributed systems

✔️ Service and accessibility status tracking

 Data Collection and Processing

✔️ Storing and analyzing performance data

✔️ Distributed data collection with Proxy architecture

✔️ Real-time system tracking

 Alarm and Notification Management

✔️ Threshold-based alarm definition

✔️ Email, SMS, and webhook notifications

✔️ External system integration support

 Visualization and Reporting

✔️ Dashboard and graph generation

✔️ Performance and capacity reports

✔️ Ticket history and transaction logs

 Configuration and Management

✔️ Centralized configuration management

✔️ Host grouping and template architecture

✔️ Automated discovery mechanism

Advantages



Open Source

Can be used without licensing costs. Thanks to its open-source nature, it offers opportunities for organization-specific development and customization.



Scalability

Can operate with high performance across different scales, from small systems to large data centers.



Template System

Thanks to ready template structures, new devices and services can be brought under monitoring quickly.



API Integration

Can be easily integrated with existing IT systems and workflows thanks to its REST API support.