# Zabbix in Action: Proven Results Across Industries

Real-world success stories showcasing Zabbix's effectiveness in tackling critical business challenges.





#### **Problem**

- Provide storage/compute as a service for the government.
- Strict regulatory and SLO oversight
- Inexperienced customer



## Challenges

- No magic unicorn
- Wide variety of types of equipment
- Moving goal posts



### Solution

- Distributed Proxies
- SLA Reporting
- SNOW Integration
- Internal Integrations



### **Outcome**

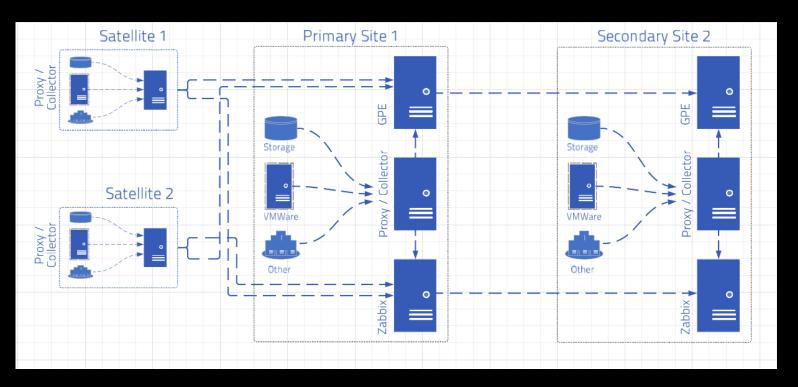
- Flexible monitoring
- Predictive alerting
- Easy Maintenance
- Happy end customers

### **INDUSTRY USE-CASE**

## Federal Gov't Agency

A large Federal Integrator providing Storage/Compute as a service and looking to simplify their capacity and performance monitoring without breaking the bank.





Overview

## Integrated Architecture

- Focus on integrations
- Consumption data
- Zabbix Control
- Report Generation



## Capacity and Compute

- I/Os per second (IOPS)
- Throughput in MB/s SAN
- Throughput in MB/s Ethernet
- Read/write ratio
- Latency
- Sequential versus random read/write
- · Read and write cache hit ratio
- · LUN identifications and mapping
- Total raw disk space storage
- Provisioned disk space
- · Disk space capacity remaining
- Disk space overcommit
- Disk space deduplication and compression
- Disk I/O

- Cache Memory
- SAN port (ISL) usage
- LUN identifications and mapping
- Compute RAM usage
- Compute processor/core usage
- Total Raw CPU in cores and hertz
- CPU in cores, hertz and % allocated
- Provisioned vCPUs
- Number of physical CPUs
- vCPUS to physical CPUs
- CPU overcommit
- Total raw memory
- Memory allocated
- Memory available
- Memory overcommit

30+

Metrics in compliance

6+

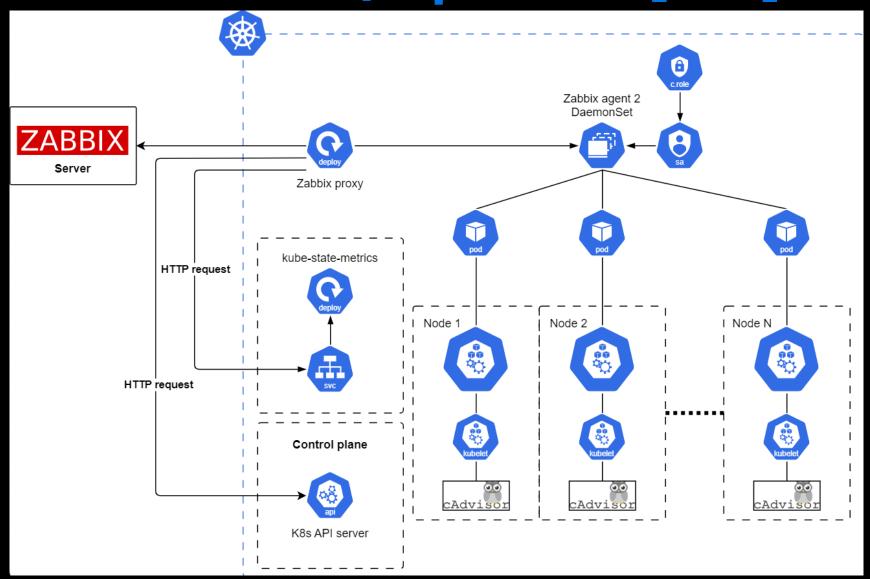
Reports generated 10+

Different technologies

1T:

Data points

## Zabbix / Openshift [k8s]



## How: Kubernetes + Zabbix?

### Deployment via Helm Chart

- Installs Zabbix components (proxy, agent) as Kubernetes resources.
- The agent monitors node-level resources and applications.
- The proxy aggregates data and sends it to the Zabbix server.

#### **Data Collection**

- Collects metrics via Kubernetes API and kube-state-metrics.
- Utilizes Prometheus-exported metrics or direct HTTP endpoint calls.

### Configuration

- Proxies and hosts are created in Zabbix to represent Kubernetes nodes and clusters.
- Templates and macros are configured to point to the Kubernetes API and kube-state-metrics endpoints.

### **Integration Advantages**

- Centralized monitoring of Kubernetes alongside other IT resources.
- Supports application-specific metrics without requiring Prometheus endpoints.
- Offers flexibility to customize and scale.



## Zabbix | Kubernetes

Technology	Link	Why?
Zabbix Helm Chart	<u>Link</u>	Zabbix helm chart with helpful installation information
Zabbix Kubernetes Overview	<u>Link</u>	Zabbix Blog written by ATS Zabbix Engineers
Zabbix Kubernetes Overview Pt2	<u>Link</u>	Zabbix Blog written by ATS Zabbix Engineers
Zabbix Kubernetes Overview Pt3	<u>Link</u>	Zabbix Blog written by ATS Zabbix Engineers
Zabbix Meetup	<u>Link</u>	Zabbix meetup discussing Kubernetes

**CONTACT INFORMATION** 

## Get In Touch With Us



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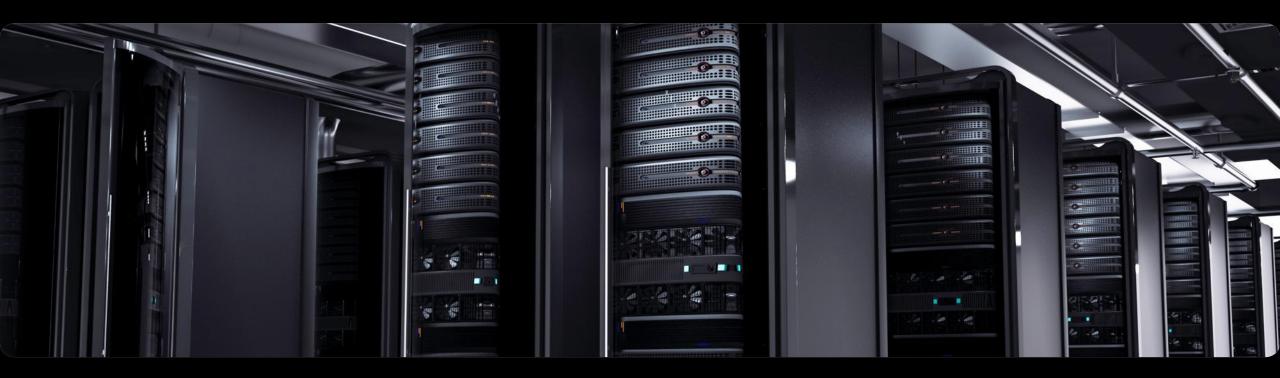
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ATS: Solving the problems others can't.

## GhankYou

Questions?