

**ZABBIX**

# Zabbix at the Netherlands Ministry of Infrastructure and Water Management

## A case study



Rijkswaterstaat  
*Ministry of Infrastructure  
and Water Management*

## Client

INDUSTRY  
**GOVERNMENT**

HEADCOUNT  
**APPROXIMATELY 17,500  
EMPLOYEES (2023)**

LOCATION  
**THE HAGUE**

ANNUAL BUDGET  
**€15.7 BILLION (2023)**

The Ministry of Infrastructure and Water Management is the Dutch ministry responsible for transport, aviation, housing policy, public works, spatial planning, land management, and water resource management.



# Challenge

The ministry needed a monitoring solution that could handle not only infrastructure monitoring, but also **IoT devices responsible for monitoring water level, water quality, temperature, and other data**. The infrastructure components that needed to be monitored included:

- Red Hat Satellite and Capsule servers
- Red Hat Virtual Data Centre monitoring
- Red Hat Identity management
- Ansible automation platform
- A wide range of custom IoT devices

# Solution

## Red Hat Satellite and Capsule monitoring

The Red Hat Satellite and Capsule monitoring setup consists of one satellite, 6 servers, 15 satellite capsules for different environments, and approximately 2,000 Linux machines connected to the satellite capsules. The machines retrieve their packages from the capsules and the capsules act as proxies that fetch data from the satellite servers. The capsules also manage the content packages and subscriptions for the machines.

## Capsule discovery and alerting

Zabbix performs capsule discovery via Low Level Discovery, which uses Http requests, which in turn collect data via the REST API. Zabbix also discovers and monitors satellite repositories, checking both when the last sync was performed and the current sync status. Software subscriptions are discovered and monitored as well, and alerts sent, with the severity of the alerts raised at the point when a subscription has only 30 days remaining.

## Licenses and identity management

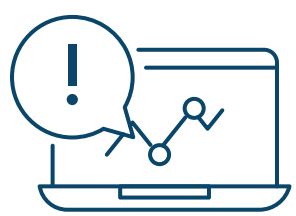
Red Hat Virtual Data Centre licences and identity management also benefit from the added flexibility that Zabbix brings to the table. For example, when it comes to Red Hat identity management, Zabbix discovers and monitors processes on the identity management platform (including identity management service status) thanks to the ability to extend Zabbix agent with user parameters.

# Ansible Automation Platform monitoring

Meanwhile, Ansible Automation Platform monitoring consists of monitoring for controllers, monitoring decommissioned machines, and monitoring configuration management jobs. Zabbix also monitors the health of IoT devices responsible for water levels, water quality, temperature, and other data, using Zabbix Agent 2 with a local agent database.

## Results

Trusting their monitoring to Zabbix has greatly improved processes at the ministry, saving time and money by:



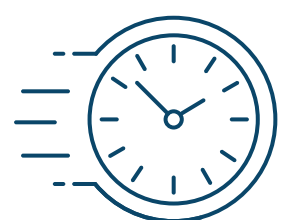
### Proactive Issue Detection

Making it easy to notice and fix issues before affected departments themselves are aware of them



### Instant Access to Historical Data

Putting the latest historical data at the fingertips of the ministry's technical teams during troubleshooting



### Faster Performance Issue Resolution

Dramatically reducing the time spent on dealing with any performance issues that arise

## In conclusion

Zabbix's flexible nature and its ability to integrate with popular platforms as well as custom devices made it the perfect "one-stop shop" for the ministry's needs, consolidating all of their monitoring in a single pane of glass and giving them complete visibility into every layer of their infrastructure - while also integrating smoothly with their existing systems.

To learn more about what Zabbix can do  
**for government institutions**

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