Digitalization means an enormous transformation process for public administration. Icinga brings better dynamics, more flexibility and reduced complexity to the city of Cologne.

Accompanying the transformation to a digitized society in a globalized world is one of the central economic and political shaping tasks. Cologne, the largest city in western Germany, is also facing the challenge of digital transformation. Around 1.1 million inhabitants live in the metropolis. To streamline and accelerate administrative routines new technologies can be of great help. The city of Cologne experienced such an innovation boost with the introduction of Icinga.

The city of Cologne employs 23,000 people in 10 departments with 80 offices. One of these is the Office for Information Processing, the competence and service center for all IT matters within the city administration. Their core mission is to provide a high-performance IT infrastructure for all departments and partners and to operate and support specialized solutions. Furthermore, they develop user-friendly digital government platforms and digitized internal processes.
Ultimately, our customers are the citizens. We have a strong sense of service and want to do our work as inexpensively as possible, but at the same time with high quality.

Wolfgang Winter
System Administrator
Office for Information Processing
City of Cologne

“Ultimately, however, our customers are the citizens. We have a strong sense of service and want to do our work as inexpensively as possible, but at the same time with high quality.”

For a long time, the heterogeneity of the city’s IT was also reflected in its monitoring. To reduce this complexity, the team was looking for a cost-effective umbrella system for the various monitoring tools.

Monitoring diversified Infrastructure

The IT infrastructure of a city like Cologne is large and complex. In various IT departments, specialists take care of different operating systems such as Windows and Linux, operate database systems such as MySQL, MariaDB and Oracle, networks, storage, ticketing systems and dozens of different applications. In terms of personnel, the city is finely divided, with each IT area having its own administration. The monitoring department is in contact with all of them.

“Our direct customers are the admins of the city of Cologne’s IT and also the employees who use our servers”, says Wolfgang Winter who heads the department together with his colleague Carsten Ludewig. “Ultimately, however, our customers are the citizens. We have a strong sense of service and want to do our work as inexpensively as possible, but at the same time with high quality.”

The Challenge
The Solution

Flexibility First

Originally Icinga was meant to be an umbrella. The other monitoring tools were supposed to stay and deliver their data to Icinga. In the meantime, however, Icinga has replaced all other systems. The city of Cologne came to Icinga on the recommendation of another administration, with which they are still in close contact today. They value the collaboration with other public administrations that also use Icinga.

Most decisive was the fact that Icinga enables much more customization than any other solution. Each department in the city has different monitoring requirements and can now design its own individual solution in cooperation with the monitoring department. And, while previously all sorts of things were monitored just because the tool offered this, they now only monitor what is actually needed.

We looked at Icinga because colleagues had recommended it. But then, Icinga convinced us by itself.

Wolfgang Winter
System Administrator
Office for Information Processing
City of Cologne

Reliable and well Integrated

Icinga also scored with its excellent integrability thanks to open interfaces. As a result, other monitoring tools have gradually become obsolete. In the Icinga setup of the city of Cologne, two Icinga servers connected to each other guarantee high availability and distribute the load among each other. Additional satellites also serve to distribute the load. Beside, an offline environment is covered by one satellite.

Even though full automation is not possible due to an older ticketing system, there are simplified processes and time savings thanks to the Icinga Director. With the help of the Director and Apply Rules, things that used to take days can now be done within an hour.

Around 3,500 hosts and 45,000 services are monitored with Icinga at the city of Cologne. In addition to the city’s ticketing system, two other open source products, Elastic Search and Logstash, are integrated.
As an open source product, Icinga impresses not only with an excellent price-performance ratio, but also with its flexibility and adaptability. Together with Thomas Widhalm from Icinga partner NETWAYS, the monitoring managers at the city of Cologne have completely rebuilt and reconfigured their pipeline.

They wouldn’t want to miss the support they receive from partner NETWAYS. “If Icinga stopped working, we would have a huge problem. For that, we need a reliable partner. In the best case, we can solve problems ourselves. But if not, there’s the support.” This knowledge gives the monitoring experts a good feeling.

*"Our Icinga systems are extremely performant. They’re nowhere near final capacity.*

Wolfgang Winter
System Administrator
Office for Information Processing
City of Cologne
We’ve become more flexible. We can give people specific permissions. And we can offer them a say in what they need.

Wolfgang Winter
System Administrator
Office for Information Processing
City of Cologne

**Trusted Monitoring Solution**

Since implementing Icinga, the team have been working with greater peace of mind. “It’s not a matter of course that monitoring systems run so reliably. In the past, the first thing we did was check the systems to see if they were still working. Icinga just runs,” Wolfgang Winter says. At the same time, they observe a change among their colleagues. While monitoring used to be sort of “forced onto” the departments, today colleagues request by themselves to include systems in the monitoring.

With the monitoring solutions that the city used to have in place, the IT specialists were far less flexible. Back then, individual checks alone cost enormous sums of money. “We can customize checks ourselves now. We decide what we monitor,” Wolfgang Winter says.

Icinga in three words? “Reliable, open and customizable.”

For the future of the city of Cologne, Icinga is set. The city’s IT will always continue to grow. And Wolfgang Winter is certain that no matter what comes along, unknown systems that may need to be integrated in the future, Icinga can handle it.
Outcomes

- Successfully replaced multiple other monitoring tools with Icinga
- Build trust of other departments for unified monitoring across different technologies
- Reliable monitoring for over 3,500 hosts of Cologne city administration
- Flexible integration with internal tools and other open source solutions
- Future-proof and scalable architecture

Share your Story

Do you also have excellent experiences with Icinga and would like to share them? We’d be happy to make your story come out big on our website!

Please get into contact with us at: info@icinga.com