Deutsche Telekom IT

Their systems engineers connect clients with applications, home office in the Telekom network and internal or public networks. Icinga monitors all of these connections.

**INFRASTRUCTURE**
Monitoring over 16,000 hosts with 95,000 services

**AUTOMATION**
Leveraging Apply Rules to automate processes

**CLOUD**
Ensuring access to Office365, Open Telekom Cloud, Azure, AWS, and Cisco Webex

**METRICS**
Integration and sharing of dashboards, extended with custom-built maps

**ANALYTICS**
Providing access to monitoring data with ease and speed

**NOTIFICATIONS**
Combining mail and SMS for a reliable workflow and ticket automation in internal customer tools

Deutsche Telekom IT is the internal network service provider of the Deutsche Telekom AG Group. Deutsche Telekom AG is one of the world’s leading integrated telecommunications companies and is represented in more than 50 countries. According to the “Brand Finance Global 500” study, it is one of the most valuable brands in the world. Its claim: Leading in customer experience, leading in technology, and leading in supporting the productivity of other companies. In fiscal 2021, it generated sales of 109 billion euros with around 226,300 employees worldwide.
What’s interesting for us is high availability and stability of the internal network and being able to monitor this very closely. We simply must be able to react quickly. If we don’t perform, no one else can do their work.

Clemens Knüpfer
IT Service Manager
Deutsche Telekom IT GmbH

Ensuring Connectivity

Ensuring that all the 226,300 Telekom employees worldwide are connected and able to work is the responsibility of the Deutsche Telekom IT subsidiary. It operates the entire network infrastructure and guarantees the productivity of its own company with employees at over 1,300 locations.

Moving forward with Speed

For speed and sovereignty of monitoring, a good connection to excellent support is essential. However, both the technology and the customer experience of the previous monitoring tool left much to be desired. It was old, not very flexible, and relatively expensive. And when a lack of support got in the way of solving a problem, it was time to change and improve the monitoring.
The Solution

High Availability

VPN, access points, firewalls, DHCP services, DNS services, hardware, office, and data center connectivity: Telekom IT monitors most of this via SNMP checks. 16,000 hosts with 95,000 services are checked by an active-active cluster. If one of the two Icinga nodes fails in this high availability cluster, the other one takes over, guaranteeing failover and stability of the monitoring.

Supported by Professionals

Telekom’s operation team cites good contact with the support as the most important factor and open source as a partial aspect in the decision for Icinga. Icinga’s enormous flexibility was only discovered and appreciated later. As a partner for consulting and support, the Nuremberg-based open source company NETWAYS assisted in the migration to Icinga, namely consultant and monitoring expert Lennart Betz.

Automated and well Integrated

To import data and automate monitoring, Telekom IT built its own solution, which integrates smoothly thanks to Icinga’s open interfaces. Telekom’s monitoring experts especially appreciate the ability to use Apply Rules to set rules and also automate so many processes. Moreover, ticket automation was integrated into internal ticketing systems, including an automatic pre-test for various system components and hardware types. “These options did not exist with the other tools we were familiar with at the time,” says Knüpfer.

The engineers have invested a lot of development work to extend their own Icinga. In addition to Icinga’s own modules, they use numerous self-built extensions, such as a maps module, one for maintenance work or site-specific bundling of data.

In the summer of 2015, Lennart from our support partner NETWAYS implemented Icinga2 based on our specifications. Since then we’ve adapted it for us and made it even better.

Clemens Knüpfer
IT Service Manager
Deutsche Telekom IT GmbH
Incident detection and handling have shortened significantly and we have fewer outages.

Clemens Knüpfer
IT Service Manager
Deutsche Telekom IT GmbH

Being Available and Accessible

300 created users, 100 of whom are highly active, work with Icinga at Telekom IT. Icinga’s Apply Rules have made their daily work much easier. Being able to write their checks allows them to implement management requirements on their own. “We have become much better at prevention because we can check more,” Knüpfer says. The time between “incident detected” and “incident resolved” has also decreased tremendously.

Peace of Mind

The monitoring team is in active communication with other companies with comparably large installations. “We’re among the biggest Icinga installations, which makes some things harder and easier at the same time.” The 24/7 Commercial Support provides fast and direct answers and the necessary peace of mind in case of emergency, as well as a direct line to Icinga’s development team. “The lines of communication are short, and the communication is refreshing,” says Knüpfer and his team. “We feel very well taken care of.” This reflects the spirit of the whole operations team. They all have been part of the journey and would recommend anytime going the route with a paid consultant to get started with Icinga.
Evolving with Icinga

In the future, Icinga Director will replace Telekom’s solution for data import and automation. And when Telekom IT’s network infrastructure evolves in the direction of Software Defined Networks (SDN), this will also be monitored with Icinga.

Outcomes

- Migrate from an existing monitoring tool to Icinga for flexibility, scalability, and support
- Cover monitoring for a huge variety of devices and applications
- Empower internal teams to act faster to guarantee the stability of the infrastructure
- Leverage the modularity of Icinga to integrate and connect with internally developed tools

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