We needed a reliable solution that monitors the relevant data traffic without loss or error to detect signs of disruption directly and provide immediate assistance to our customers. For example, in case of a service interruption due to technical problems.

DIPL. INFORM. ATHANASIOS AVGERIDIS
SVP Core, IP Networks & Operations, Magenta Telekom

Challenges
• Handle the rapid increase in data traffic
• Ensure high quality and availability level of the networks
• Expand the existing monitoring solution with products that also enable the monitoring of 4G and 5G subscriber network traffic

Solution
• GigaVUE® HC Series
• GigaSMART® Traffic Intelligence

Customer Benefits
• Real-time performance analysis
• Seamless reporting on mobile and broadband network activities
About Magenta Telekom

Magenta Telekom (T-Mobile Austria GmbH) is one of the leading telecommunications providers in Austria. With around 2,200 employees, the company generated revenue of around EUR 1.35 billion in 2021. As part of the Deutsche Telekom group, it benefits from the innovative strength and financial stability of the group, one of the largest players in the global market of Telekom. Magenta Telekom offers customers ultrafast broadband via fiber optic cable and coaxial cable, as well as mobile communications, business solutions, entertainment, and the latest technology for digital life. The Austrian provider also acts as a center of excellence for the entire Deutsche Telekom group in all areas, including the internet of things (IoT).

The challenge was to restructure the traffic while still estimating the total volume correctly.

INGO WEBER
Key Account Manager Magellan Netzwerke

Business Challenge

Magenta Telekom uses a hardware-based monitoring solution for nationwide monitoring of network availability and analyzing sources of errors. However, increasingly powerful systems are needed to ensure the quality and performance of fourthand fifth-generation mobile networks. They need to be able to handle the rapid increase in user traffic.

This is not an easy task: The volume of network traffic in mobile communications is increasing exponentially each year. This makes it more important for Magenta Telekom to continue to ensure the high quality and availability level of the networks. This task can no longer be accomplished without measurement and analysis platforms specifically geared to today's data volumes and transmission rates.

It was therefore necessary to expand the existing monitoring solution with a solution that also enables the monitoring of 4G and 5G data traffic. For this purpose, Magenta Telekom specifically looked for a system that analyzes modern mobile connections and sounds an alarm at an early stage when line or performance problems occur.

Resolution

Maximum performance and security across the entire supply network — that is Magenta Telekom’s maxim. To ensure this in the future, magellan netzwerke installed a powerful next-generation network packet brokering solution for managing and monitoring both control and data traffic.

To monitor and secure the network at Magenta Telekom according to the latest standards, the magellan DANT (Data Access and Network Telemetry) team drew up a rough and detailed plan for the systems and deployment scenarios in question. The experts then implemented the Gigamon Deep Observability Pipeline, for acquiring and aggregating control and data traffic across Magenta Telekom’s entire mobile coverage area. The latest-generation of the Gigamon Deep Observability Pipeline can also monitor 4G and 5G data traffic based on real-time applications while at the same time guaranteeing performance and ensuring efficient traffic management with load-balancing in the core network.

For this purpose, they can correlate GTP (GPRS Tunnelling Protocol) user traffic. This function was not available in the hardware previously used, which was one of the decisive reasons for upgrading the monitoring solution. At the time of project implementation, GTP correlation (including 5G and CUPS) technology was relatively new on the market, so Magenta Telekom and magellan netzwerke were considered real pioneers in this field.
Our network capacities are constantly growing. That’s why we are glad to have magellan supporting us to expand the infrastructure.”

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When implementing the new solution, the experts from magellan netzwerke had to carry out detailed pre-filtering. This was because the monitoring system had grown historically in such a way that a redistribution of the data flows across the Gigamon Deep Observability Pipeline components was necessary.

Benefit

Today, Magenta Telekom is equipped with a highly available monitoring solution that provides realtime performance analysis and seamless reporting on mobile and broadband network activities.

About Magellan Netzwerke GmbH

magellan netzwerke GmbH was founded on April 1, 1992, in Cologne and now employs over 280 people in ten locations. Since 2016, magellan has also been a company of the FERNAO Networks group of companies, which combines the know how of several successful IT companies. magellan’s expertise is broadly diversified and includes key topics such as IT security, IT infrastructure, monitoring and data analytics, cloud and data center solutions and managed services. More information: magellan-net.de.

About Gigamon

Gigamon offers a deep observability pipeline that harnesses actionable network-level intelligence to amplify the power of observability tools. This powerful combination enables IT organisations to assure security and compliance governance, speed root-cause analysis of performance bottlenecks, and lower operational overhead associated with managing hybrid and multi-cloud IT infrastructures. The result: modern enterprises realize the full transformational promise of the cloud. Gigamon serves more than 4,000 customers worldwide, including over 80 percent of Fortune 100 enterprises, nine of the 10 largest mobile network providers, and hundreds of governments and educational organisations worldwide. To learn more, please visit gigamon.com.