



## Swisscom Elevates VoIP Analysis and Troubleshooting: The Upgrade from Allegro 5500 to 7510

Doubling Performance and Enabling Real-time L7 Analysis While Optimizing Infrastructure Costs

Swisscom, Switzerland's leading telecommunications provider, has long been at the forefront of delivering reliable communications services. With the transition to Voice over IP (VoIP) complete, Swisscom now manages almost 11 million lines, routing all calls through a state-of-the-art IP network. After the first major successes with the Allegro 5500, Swisscom has taken a bold step forward by upgrading to the newest model, the Allegro 7510, revolutionizing their VoIP analysis capabilities and setting new benchmarks in the industry.



**Industry:** Telco

**Company size:** > 19.000 (2023)

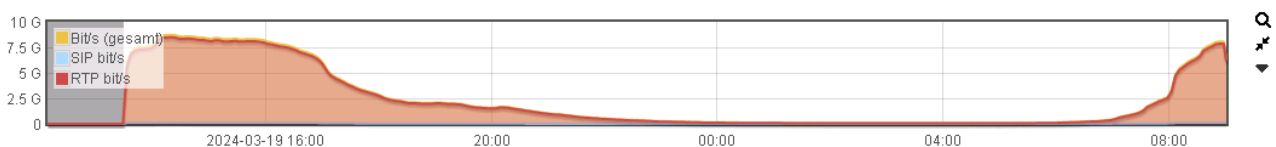
**Country:** Switzerland

### The Challenge

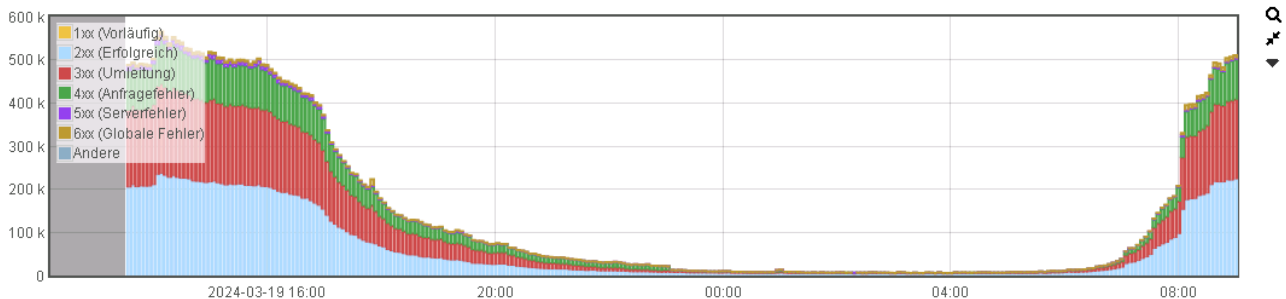
The challenge of VoIP traffic continues to surge, Swisscom faced the daunting task of maintaining impeccable service quality while handling over 12 million packets per second at peak times. The need for deeper, real-time insights into network performance became critical. Additionally, Swisscom sought to expand their capacity for historical data analysis without incurring prohibitive costs. The challenge was clear: how to dramatically enhance both live and retrospective analysis capabilities in a scalable, cost-effective manner.

### The Solution

Swisscom found their answer in upgrading from the Allegro 5500 to the cutting-edge Allegro 7510. This strategic move brought several key enhancements:



SIP, RTP and total traffic



SIP call response types

1. **Doubled Analysis Performance:** The Allegro 7510 scales up to match the intensity of Swisscom's data flows, providing more robust handling of massive packet volumes.
2. **L7 Real-time Analysis:** The 7510 enables the extraction and analysis of up to 100,000 parallel VoIP calls in real-time, offering unprecedented visibility into call quality and network behavior.
3. **Expanded Ring Buffer:** Utilizing Allegro Packets' JBOD, the 7510 integrates over 80 HDDs, vastly increasing storage for historical data and facilitating comprehensive retroactive analysis.
4. **Cost-Effective Scaling:** By upgrading to the 7510 while continuing to use existing measurement cards, HDDs, and JBOD setups, Swisscom optimized expenditure while significantly boosting capabilities.

## The Results

The transition to the Allegro 7510 has transformed Swisscom's ability to ensure VoIP excellence:

- **Proactive Issue Resolution:** Real-time L7 analysis allows Swisscom to identify and address potential problems before they impact customers, minimizing service disruptions.
- **Deeper Insights:** The expanded ring buffer provides a wealth of historical data, enabling more thorough troubleshooting and trend analysis.
- **Operational Efficiency:** Despite the substantial performance upgrades, the cost-effective approach to scaling has optimized Swisscom's investment, balancing innovation with fiscal responsibility.
- **Future-Ready Infrastructure:** With the Allegro 7510, Swisscom is well-positioned to handle growing VoIP demands and increasing network complexity, ensuring they stay ahead of the curve.



## Customer Testimonial

Stephan Bieri, Senior System Engineer, Voice and Messaging Infrastructure Services at Swisscom, shares his perspective:

**”** Upgrading from the Allegro 5500 to the 7510 has been truly transformative. The ability to perform L7 real-time analysis on up to 100,000 parallel calls gives us insights we never had before, allowing us to be more proactive than ever in maintaining service quality. What's equally impressive is how we've managed to double our analysis performance and greatly expand our storage capacity while keeping costs in check. The Allegro 7510 delivers cutting-edge capabilities with smart resource management, keeping Swisscom at the forefront of the telecommunications industry. With this setup, we're not just meeting today's VoIP challenges – we're prepared for whatever the future may bring.

Swisscom's evolving success story with Allegro Packets, marked by the upgrade from the 5500 to the 7510, underscores how strategic investments in network analysis can drive significant advancements in service quality, operational efficiency, and customer satisfaction. As the demands on VoIP networks continue to grow, Swisscom stands ready, armed with the Allegro 7510 to turn big data into unparalleled service delivery.

### Allegro 7510: For Enterprise Core Networks, Data Centers, ISP Networks

- Weighs 40 - 80 kg
- Up to 200 Gbit/s max. capture rate
- 4 extension slots (1 - 400 Gbit/s Cu or fiber)
- 437 x 178 x 699 (L / H / D in mm)
- 92 GB internal database memory, expandable up to 3 TB
- Up to 600,000 active IP and 64 million concurrent connections
- Dynamic ring buffer, expandable up to 36 x 3.5" SATA/SAS3,



#### About Allegro Packets

Allegro Packets, a German-based company, offers portable and rack-mount solutions for network analysis and packet capturing. The brand is setting new benchmarks by combining high performance, reliability, active development, relentless support, and fair pricing in its all-in-one proposition. Allegro Packets' solutions are recognized and utilized by service providers, government organizations, healthcare institutions, and enterprises worldwide.

Website: [www.allegro-packets.com](http://www.allegro-packets.com)