



Partner: German high-tech

concern

Solution: Multiple, redundant

contact centre

deployment

Industry: Public safety

Requirement: High channel counts

in VM dployments

## The challenge

The customer's flagship system, a standard part of the central emergency call handling system used by police forces, fire departments and rescue services for many years, was ready for further evolution. A recent modernisation project introduced communications with IP interfaces, incorporating Aculab's Prosody X boards as a key component. Crucially, however, the latest development had to be an all-IP, software-based solution.

The police force of the country's most populous state, containing four of Germany's ten largest cities, had to be equipped with the most advanced control centre technology. Aculab's customer was contracted to build networked central control units at five sites throughout the state, to which all of the state's forty-seven police headquarters were to be interconnected.

The customer's telephony software requirements included:

- Familiar signalling and media processing APIs
- Fully featured software suite, including call recording
- Scalable for small to very large command & control rooms
- Capacity exceeding four million emergency calls per year
- High availability and continuity through element redundancy
- Resilient, IP-based, distributed architecture
- Reliable, deployment proven telephony software
- Cost-effective and portable channel licences
- Deployable on hardened, Linux VM instances
- 5-year support commitment



# Aculab and Public safety:

Aculab's software stack underpins massive PSAP solution in Germany.

#### What the customer told us:

"There is no question we had a tough assignment in meeting the requirements for this project, and we are thankful for the excellent cooperation proffered by Aculab in the past months.

"Aculab's Prosody S became an essential component in helping us to achieve our aims and the familiarity of its APIs helped us enormously in migrating from its DSP hardware platform.

"Bearing in mind the huge number of channels we needed for capacity across the network, it was gratifying to be able to strike a deal with Aculab and to take early advantage of its new software licensing system.

"Aculab is a great company to work with and I'd wholeheartedly recommend those guys to any vendor in the 112 space."

Spokesperson,
Software
Development

#### For more information

To learn more about Aculab Cloud and Aculab's extensive telephony solutions visit:

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#### The solution

Aculab's Prosody S telephony software stack enabled the development of a distributed, highly available, redundant and resilient IP-based architecture.

Crucially, it also provided reliable, SIP-based communications, together with telephony media signal processing, including conference bridging and essential call recording functionality.

Furthermore, scalability and redundant licence portability was gained through the use of Aculab's next-generation licence manager system.

### The outcome

Using Aculab's telephony software and familiar APIs, the customer's specialist development team was able to architect, develop and bring into production a solution that met the stringent requirements of its state-wide, police force client, on time and in full.

For deployment throughout 2017, the solution will replace nigh on 50 legacy call centres, changing the operational concept from a standalone mode to a centralised concept, whereby all intelligence is to be hosted in five replicated and redundant locations.

The stringent requirements for IT security and availability, including provision for continuity of service, even when two locations are 'off the air' (conforming to the German BSI category 'very high'), were met, enabling the state police force's goal of being seen as a technology leader to be realised.

Due to the distributed architecture, the customer's police client has also been able to realise significant operational savings versus the previous model. And in terms of performance, the system is scalable with buffer capacity to cater for call levels of up to 4.5 million emergency calls per year, at more than 12 calls per second during peak times. That's something that is simply no longer economically feasible on legacy, hardware-based systems.

Aculab's software presents none of those limitations; on the contrary, it offers many advantages.

#### About the customer

Aculab's customer is a leading, global technology concern, specialising in market areas that include transport, security and public safety.

As a recognised and renowned player in the German high-tech industry, the customer offers its domestic and foreign clients modern, highly secure and continually available communications and information management systems, in addition to transport control systems and targeted solutions for security, civic protection, and public safety.

#### **About Aculab**

Aculab is an innovative company that offers deployment proven technology for any telecoms related application. Its enabling technology serves the evolving needs of automated and interactive systems, whether on-premise, data centre hosted, or cloud-based.

Over 1000 customers in more than 80 countries worldwide, including developers, integrators, and solutions and service providers, have adopted Aculab's technology for a wide variety of business critical services and solutions.

Aculab offers development APIs for voice, data, fax and SMS, on hardware, software and cloud-based platforms, giving a choice between capital investment and cost-effective, 'pay as you go' alternatives.