EASY TRANSITION TO 100GBIT

CASE STUDY

Industry » Service Provider

Challenge
Transition to 100G in core network necessitated an upgrade of its network architecture to distribute monitoring traffic to accommodate 10G tools which would have otherwise been rendered obsolete.

About the telecom operator

The telecom operator is a leading operator in Bangladesh with the highest number of subscribers and widest network. It has built the most extensive cellular network in the country with over 8,000 base stations. Most of the country's population is within the coverage area of the telecom operator's network.

The entire network is GPRS/EDGE/3G/4G enabled, allowing access to dial-up quality speed Internet and data services from anywhere within the coverage area. There are approximately 70 million GPRS/EDGE/3G/4G users in the telecom operator's network.

The Challenges

The telecom operator recently upgraded its network infrastructure to include 4G which was delivered by one of Europe's largest networks and system integrator. Due to the current upgrade, 10G tools had become obsolete in a 100G core network environment. Transition to 100G in core network necessitated an upgrade of its network architecture to distribute monitoring traffic to accommodate 10G tools which would have otherwise been rendered obsolete.

Additionally, with the ever-growing traffic demands on the network, the operator had to prepare to expand its monitoring infrastructure. During this transformation, the telecom operator wanted a solution which could make monitoring efficient and increase its commercial success by maximising connectivity. The end goal of the operator was to lower the costs of the network infrastructure, support new services and keep the subscribers happy.

The challenges faced by the operator included reducing network complexity and utilising the existing monitoring tool to deal with the increased bandwidth.

Solution

Cubro offered the telecom operator 100Gbit tapping and 100Gbit network packet brokers EXA32100.
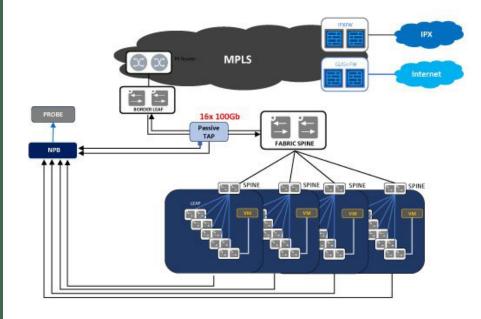
Heart of the solution are the EXA32100s, which are advanced network packet brokers with higher layer capabilities offering wire-speed handling of packets.

The Technical Solution from Cubro

Cubro offered the telecom operator 100Gbit tapping and 100Gbit network packet brokers EXA32100. The project which started in 2017 would last until 2022 due to the on-going expansion due to the rapid growth of mobile traffic on this operator's network. Currently, there are no monitoring probes which can monitor 100Gbit traffic. Therefore, with Cubro's TAPs and network packet brokers, the telecom operator is able to scale its networking infrastructure and get complete visibility of the traffic. The project includes future expansion needs of the operator. Cubro devices were the best option for the operator due to the best price-performance ratio. The devices can handle such high bandwidth traffic in real time.

The project was successfully implemented, and Cubro's team was part of the planning and installation. Cubro's responsive technical support team is another value addition offered to the operator as part of the project.

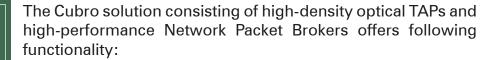## Tapping Solution – 2018 Expansion Architecture

Customer Review

"We have achieved 100% visibility, essentially creating a full reflection of our network. As a result, the monitoring tools can now perform smoothly. We have enhanced QoS and QoE among our customers."

The Cubro solution consisting of high-density optical TAPs and high-performance Network Packet Brokers offers following functionality:

- Fully passive tapping of 16 x 100G Links & 4 x 100G Mirror Port
- Separating control and user plane using VLAN ID and/ or IP addresses and forwarding to the different probing system
- VXLAN termination and VNI tag filtering
- GTP Load-balancing of user plane traffic based on inner IP Addresses to make maximum use of the probes
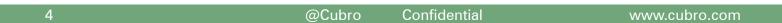
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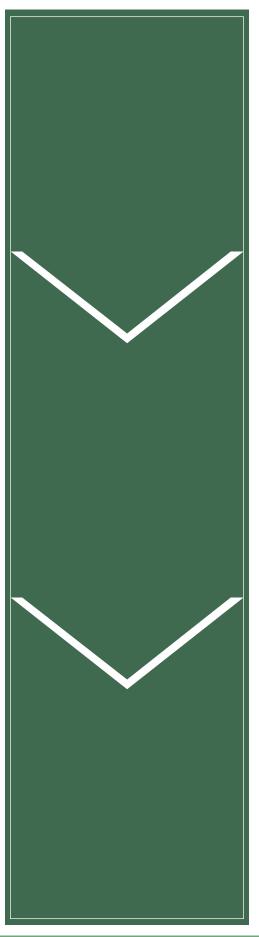
Business Benefits

Cubro solution enabled the operator to manage complexity, evolve and modernise their networks for scale, speed and efficiency and ensure network and service quality. The telecom operator has achieved 100% visibility, essentially creating a full reflection of their network. As a result, the monitoring tools can now perform smoothly.

The primary business benefits include:

1. Reduced MTTR
2. Increased quality assurance
3. Tool platform optimisation by load balancing across a variety of tools
4. Opex savings by increasing tool longevity, with the ability to use existing monitoring tools
5. Enhanced customer satisfaction

About Cubro

Cubro Network Visibility is a leading vendor of Network Probes, Network Packet Brokers (NPBs), Network TAPs, a partner of the world's largest telecom companies, and has installations in enterprises on all continents. Our mission is to provide simple, flexible and most reliable network visibility solutions to our customers. We offer a full portfolio of network visibility products which can help organisations to gain insight into their network traffic. We are continually developing new products and features. Our head office is in Vienna/Austria.

We offer best customer support in all time zones through our sales offices located in Europe, USA, Japan and Asia.